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TRAUMATIC RETROPERITONEAL POSTAMPULLARY RUPTURE OF THE DUODENUM WITH EMPHYSEMA OF THE MESENTERY

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In this paper a case is reported of retroperitoneal rupture of the third part of the duodenum resulting from blunt abdominal trauma, and diagnosis, management and prognosis of such injuries are considered, with particular mention of (1) the sign of emphysema of the mesentery, and (2) a suggested method of treatment.

The third part of the duodenum commences at and to the right of the third lumbar vertebral body, and passes horizontally to the left in front of the body of this vertebra to end in its 4th part in front of the abdominal aorta. Its anterior surface is covered with peritoneum except where it is crossed by the superior mesenteric vessels; the posterior surface is 'bare'.

Rupture of the duodenum by blunt abdominal trauma is relatively rare. It occurred in 9% of Harrold's series of closed intestinal rupture.¹ Zachary Cope² states that in the Second World War wounds of the duodenum formed only 2% of all abdominal injuries. Mortality however was 50%.

CASE REPORT

P.M., an adult male of 26 years, was admitted to St. Mary's Hospital, Mariannhill, Natal, at 6 p.m. on 18 November 1957. His history was that 24 hours earlier he was involved in a brawl during which he was struck twice across the abdomen with a long stick. At first he appeared to suffer no ill effects from the injury but early on the morning of the 19th (15 hours after receipt of injury) he suddenly developed acute pain over the whole abdomen. This pain was constant in site and in intensity and did not abate when he was brought to hospital.

He lay supine in bed, anxious and still. Pulse rate 94 per minute. Temperature 98°F (36.7°C). Respiration was rapid and shallow. There was no air-hunger. The abdomen was distended and bore a small, fresh, superficial abrasion just below the middle of the right costal margin. There was also a narrow, linear bruise across the skin in the right iliac fossa. The abdomen was guarded throughout, with maximum tenderness in the right iliac fossa. On percussion no loss of liver dullness was found, nor was the presence of free fluid in the abdomen elicited. Auscultation of the abdomen revealed no bowel sounds. A diagnosis of rupture of the caecum was made and immediate abdominal exploration instituted.

At 7 p.m. the same evening (25 hours after injury) operation was performed under general anaesthesia of thiopentone, nitrous oxide, oxygen and Flaxedil, administered by Dr. J. Cave. Through a right paramedian incision the peritoneal cavity was entered. A small amount of blood-stained fluid escaped. The small intestine was examined from duodeno-jejunal flexure to ileo-caecal junction and the colon from caecum to sigmoid but no perforation could be found. These structures were in a state of ileus and

were markedly distended. No smell of faeces was discernible. It was noticed, however, that small blebs of gas aggregated in clusters of varying size were lying between the leaves of the mesen-

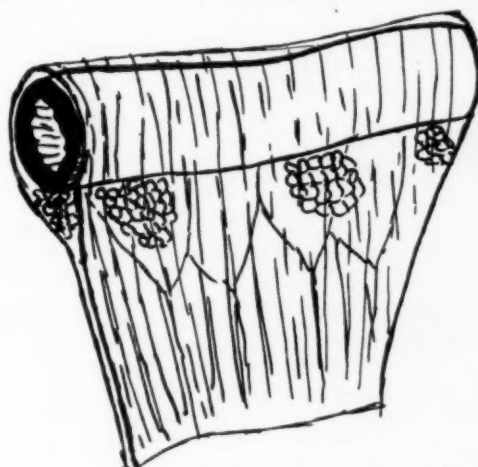


Fig. 1. Segment of jejunum to illustrate diagrammatically the surgical emphysema of the mesentery. The aggregated bubbles of gas are shown in small clusters lying in a juxta-intestinal position.

tery of the small bowel. These gas bubbles gave the involved parts of the mesentery a frothy appearance and a sensation of crepitus to the touch. They were found in patches, always in a juxta-intestinal position and never extending down to the root of the mesentery. This mesenteric surgical emphysema was most abundant in the mesentery of the jejunum. Retroperitoneal crepitus was not felt. Fig. 1 illustrates, diagrammatically, the emphysema of the mesentery.

It was evident that rupture of a retroperitoneal portion of the intestine had occurred—most likely in the third part of the duodenum. The caecum, ascending colon and hepatic flexure were now mobilized and turned medially to the left to expose the left kidney in its fascia and the third part of the duodenum. On the posterior aspect of this viscus, which covered the vertebral body, an oblique tear was found about 1 inch (2.5 cm.) in length. The mucosa was everted and bile-stained.

The rent in the duodenum was closed in 2 layers, the inner with a continuous catgut suture and the outer with closely applied interrupted black linen thread. Closure was difficult because the distended duodenal wall was thinned, oedematous and did

not hold sutures well. It was considered likely that duodenal fistula might develop, and an attempt at its prevention was therefore undertaken as follows:

Two separate small openings 1 inch (2.5 cm.) apart were made in the anti-mesenteric wall of the first part of the jejunum just distal to the duodeno-jejunal flexure. Two lengths of no. 4 gauge polythene tubing were passed through these apertures—one proximally into the duodenum for about 6 inches (i.e. proximal to the duodenal rupture), and the second distally into the jejunum. The proximal tube was to serve for continuous suction of the duodenum; it will be called the 'duodenal suction tube'. The distal tube was to be used initially for intestinal decompression but with the return of peristalsis was to serve as a feeding tube; it will be called the 'jejunal feeding tube'. By this means the paralyzed duodenum could be kept relatively free of gastric, duodenal, biliary and pancreatic secretions. Furthermore, these secretions could immediately be returned into the jejunal feeding tube. The intubated portion of the jejunum was covered with omentum and later anchored to the upper limit of the abdominal incision, a glove drain was inserted through a separate stab incision in the right flank and passed behind the ascending colon, in a retroperitoneal position, to the traumatized and sutured duodenum.

Immediate post-operative treatment consisted of continuous gastric suction through a Ryle's tube inserted through the nose, continuous duodenal suction through the duodenal suction tube and continuous intestinal suction through the jejunal feeding tube. Adequate intravenous fluids were administered, containing 500 mg. of Terramycin (oxytetracycline) twice daily for 5 days. After 4 days bowel sounds were audible and the intestinal suction was discontinued. Water only was allowed by mouth but jejunal feeding was commenced with citrated milk to which was added protein hydrolysate as well as the foregut secretions obtained through the duodenal suction tube (800-1,200 c.c. daily). By this means the state of hydration of the patient was well maintained. At first the stab drain was fairly dry but on the 8th post-operative day there was a copious discharge of watery, faintly alkaline, bilious fluid, which diminished in amount within 48 hours but persisted in lesser amounts over the ensuing weeks. So long as this evidence of duodenal fistula persisted duodenal suction was maintained—5 weeks in all.

On the 24th post-operative day acute intestinal obstruction developed, which at operation was found to be due to volvulus of a viable loop of ileum which had attached itself to the lower limit of the original operation incision. The volvulus was corrected, and the opportunity was taken at this operation to inspect the region of the jejunostomies. The polythene tubes lay snugly in position with little tissue reaction around them. As far as the host tissues were concerned the polythene was inert and did not evoke an inflammatory response. The area of the duodenum was not disturbed.

By the 5th post-operative week there was no further discharge from the stab drain. The duodenal suction and jejunal feeding tubes were pulled out when, within 12 hours, the jejunostomy was dry.

Further convalescence was interrupted by the development of a retroperitoneal, pre-renal abscess. This was demonstrated by means of a sinogram and discharged itself through the site of the stab drain in the right flank. The patient was eventually discharged on 31 January 1958.

DISCUSSION

1. Mechanism of Duodenal Injury

Duodenal injury from blunt trauma to the abdomen may be of two types:

(i) *Crush injuries.* Direct trauma by a stick, animal kick, vehicular accident—indeed any blunt object—is applied to the anterior abdominal wall. The strength of the applied force need not be very great—estimated at over 6 pounds—but sufficient to impact the posterior wall of the duodenum against the body of the 3rd lumbar vertebra. The duodenal rupture is posterior and retroperitoneal.

(ii) *Blast injuries.* In these cases there is a 'blow-out' caused by the secondary movement of air away from the

scene of explosion. The duodenum ruptures away from the vertebral column.

2. Diagnosis of Closed Intestinal Rupture

Abdominal tenderness, guarding and rigidity as an index of intra-abdominal injury may be fallaciously interpreted. Indeed, injury to the abdominal parietes alone may evoke these signs. Loss of liver dullness due to a subphrenic collection of gas is a valuable clinical sign when present and is confirmed on an erect X-ray of the abdomen.

The most reliable and simple clinical sign of hollow viscus injury is loss of bowel sounds on auscultation of the abdomen. Rob³ showed that in 95 cases of penetrating lesion of a hollow viscus peristalsis was absent in 89, i.e. 93.7%. In 71 cases with no lesion, peristalsis was present in 70 and absent in 1 only. Rob concluded that 'the absence of peristaltic sounds, confirmed and reconfirmed, was a positive indication for laparotomy but that the presence of peristaltic sounds was only a valuable guide and not a positive indication for conservative treatment'.

3. Operative Diagnosis of Retroperitoneal Duodenal Injury

Johnson¹ reports Schumacher's and Miller's analysis of 46 cases of retroperitoneal rupture of the duodenum. In 14 of 37 patients operated on the lesion was not found. Cope² counsels that the presence of a *retroperitoneal haematoma* should remind the surgeon of the possibility of a tear of the posterior wall of the duodenum. If the retroperitoneal haematoma is bile-stained the diagnosis is absolute.

Retroperitoneal emphysema was mentioned as being observed in 13 of 52 cases analysed by Johnson. In such cases retroperitoneal air would have been observed on abdominal X-ray.

Mesenteric surgical emphysema following abdominal trauma has, as far as I can ascertain, not been recorded. In the case described here it was a sign indicating retroperitoneal rupture of a hollow viscus, most likely the duodenum. Had the mesenteric emphysema not been observed there is no doubt that the abdomen would have been re-sutured and the injury missed. Fig. 2 depicts the pathway of the mesenteric emphysema.

The frequency of concomitant liver injury with duodenal injury is of great significance. It occurred in 9 of 52 cases (17%) in Johnson's collected series.¹ This serves to emphasize the need to examine the duodenum where liver injury has been found.

4. Complications of Duodenal Rupture

Wounds of the duodenum carry a sinister mortality of about 50%.² This is due to (a) the frequency of injury to neighbouring viscera; (b) peritonitis; (c) retroperitoneal abscess; (d) the relative inaccessibility of a large part of this portion of the intestinal tract and the likelihood of missing such injuries; (e) the formation of a persistent external duodenal fistula. The last mentioned complication is noted in 8 of the 31 patients in Johnson's analysed series who survived longer than 5 days after operation. Of these 8 patients with external duodenal fistula 5 succumbed.

Pre-ampullary external duodenal fistulae are frequently encountered after operations for chronic duodenal ulcer. They almost always close spontaneously. The post-ampullary external duodenal fistulae are more serious because they seldom heal. The high enzyme content of the pancreatic juice no doubt interferes with duodenal repair. The copious

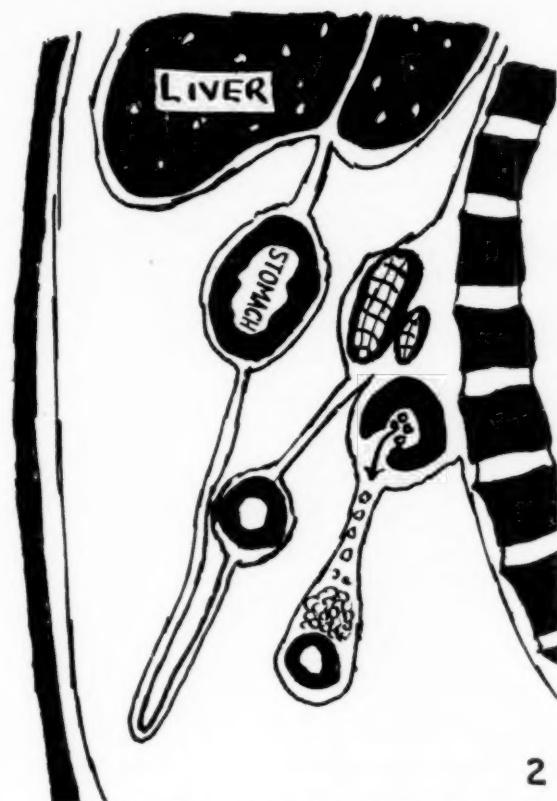


Fig. 2. A diagrammatic sagittal section through the abdomen in the median plane. A tear is shown in the duodenum with the arrow pointing to the pathway of the gas between the leaves of the small-bowel mesentery.

loss of fluids and electrolytes *via* the fistula leads to rapid dehydration and electrolyte imbalance. One has but to recall that 800-1,200 c.c. of pancreatic juice containing 8 g. of NaCl are secreted daily. Furthermore, up to 1,500 c.c. of gastric juice aspirated from the stomach is lost daily. The bile loss amounts to 300-500 c.c. Walters and Bollman⁵ showed that animals discharging secretions through an isolated duodenal loop fistula died in 7 or 8 days.

5. Treatment of Retroperitoneal Duodenal Injury

Methods of treatment of retroperitoneal duodenal injury in the past have included (i) simple drainage, (ii) simple suture, (iii) suture plus gastro-enterostomy, (iv) resection of 15 cm. of duodenum and duodeno-jejunostomy, (v) suture plus jejunostomy, and (vi) end-to-end anastomosis of the duodenum.

Because post-ampullary external duodenal fistula occurs so frequently after retroperitoneal duodenal rupture, because it carries such a poor prognosis and because its treatment consists of jejunostomy through which duodenal suction is instituted, the occurrence of the fistula should be anticipated, and in *all* cases of post-ampullary duodenal injury a duodenal suction jejunostomy and jejunal feeding jejunostomy should be created at the same operation as the primary duodenal repair. Duodenal suction is obligatory. It immediately removes all high-enzyme gastric and pancreatic juice from a traumatized duodenum in a state of ileus which acts as a sump for these secretions. Furthermore, should a fistula develop despite attempt at prevention, then definite treatment of this condition can immediately be instituted without the need for the operation of jejunostomy at this stage and before dehydration and hypochloreaemia develop.

The method of treatment here put forward is simple, safe and not irrational.

SUMMARY

A case of retroperitoneal rupture of the third part of the duodenum is reported.

The mechanism of duodenal injury following blunt abdominal trauma is discussed, together with the pre-operative diagnosis of rupture of a hollow viscus.

The signs to be found at operation which indicate duodenal rupture are discussed, special mention being made of mesenteric surgical emphysema.

The complications of duodenal rupture are noted.

A method of treatment of retroperitoneal duodenal injuries is advocated.

I am gratefully indebted to Dr. J. Brouckaert of St. Mary's Hospital for the care and devoted attention he has given the case described.

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PSYCHIATRIC SERVICES IN SOUTH AFRICA

The present state of our psychiatric services was discussed in these columns some months ago.¹ Since then there has been much indication of the serious view which both the public and the medical profession are taking of the alarming and critical defects in the psychiatric services of this country. The National Group of Neurologists, Psychiatrists and Neurosurgeons (M.A.S.A.) discussed this problem at their annual general meeting in Durban some days ago. (Elsewhere in this issue of the *Journal* we publish a paper read by the President of the Group on *Mental Health and Public Health*.) A new mental health campaign is being organized currently at the Tara and Sterkfontein Hospitals in Johannesburg. The defects in facilities for treating mental illness have been reported by various branches of the Mental Health Society. Finally, the matter has been discussed by members of parliament in the House of Assembly. The time is now opportune to state clearly the needs of this country in the field of psychiatric services.

The mental hospitals. The 10 mental hospitals in the Union of South Africa are crippled by grave defects. They have been overcrowded for years. Inevitably, treatable patients remain neglected in the community until such time as they can be admitted—and then it is often too late for treatment to be successful. Increased mental hospital accommodation is an urgent need. But vast mental hospitals, costing millions of pounds, are not needed. The asylums of the past were overcrowded, prisonlike buildings where patients were forcibly detained in an unreal, sequestered world with little hope of cure. With modern psychiatric treatment, the emphasis has shifted to rapid and intensive treatment, followed by supervised rehabilitation of the patient in the community outside the hospital. The psychiatric hospital should be the headquarters of the community's local mental health organization, a training and research centre needing a relatively small residential unit for special investigation and treatment.²

In addition to mental hospital facilities, beds must be provided outside mental hospitals (i.e. in general hospitals) for early and remedial psychiatric cases. Blacker³ has calculated that 100 such beds are needed per million of population, i.e. 2.3% of the beds necessary for patients in mental hospitals. These beds should be provided as psychiatric units in general hospitals.

The split in medical and psychiatric services in South Africa. To improve the quality of psychiatry practiced, the mental services must be integrated with general medicine. It is not to be expected as long as the present rift exists between general medicine under Provincial administration on the one hand,

and psychiatric services separately administered under the Union Department of Health on the other, that such integration can occur. In the mental health service there is a serious relative shortage of doctors with the necessary psychiatric training. Promotion depends on seniority, academic training being of less account; numerous transfers all over the Union disrupt any chance of the psychiatrists getting to know and understand the communities in which they work. Outstanding clinicians are usually people attached in a long-term way to one hospital.

The general medicine practised in this country is on a level with that of any country in the world; but psychiatric practice is utterly inadequate. Mental hospitals must be linked closely with general hospitals if the psychiatric needs of a community are to be served.

Facilities for treating mild mental disorder. There is a glaring lack of provision for treatment of patients with psychoneurotic conditions and the milder forms of mental disorder, which respond particularly well to therapy. For these patients there is only one provincial hospital in the country, the Tara Hospital in Johannesburg. Most of the patients with mild illness are therapeutically destitute; numbering many thousands, they depend on the out-patient departments of a few big hospitals and on private psychiatrists. Treatment in private is often protracted and its cost prohibitive.

Auxiliary psychiatric services. Facilities for the care and treatment of feeble-minded patients of all races are alarmingly deficient. Facilities for the treatment of children with behaviour disorders are inadequate. There is great need of a special hospital where mentally deranged patients with criminal tendencies can be accommodated and treated. Facilities for training and employing psychiatric social workers is woefully lacking; not a single social worker is employed in any one of our mental hospitals.

Training of psychiatrists. Undergraduate and postgraduate training in psychiatry is an urgent need to which our universities must give concentrated attention.

Plea for a commission of enquiry. The duty falls on the medical profession, with its great responsibility to the people it serves, to call immediately for a commission of enquiry, to investigate the state of psychiatric services at the present time on a truly national basis, and to have included in the terms of reference of such a commission not only repair of our failing present facilities, but also planning for more adequate services in the future.

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REHABILITASIE NA SIEKTE

Die opvatting dat behandeling nie ophou by herstel onmiddellik na 'n siektetoestand nie, maar dat dit heel dikwels dan eers begin, word al meer algemeen aanvaar in mediese

kringe. Die kliniese benadering en spesifieke mediese behandeling van 'n geval bly belangrik en sal natuurlik altyd belangrik bly. Maar, ons besef vandag al meer dat ons nie

net die siekte as sodanig moet behandel nie, maar dat ons ook die mens wat siek is, in gedagte moet hou.

Dit is dus verblydend om te kan meld dat daar onlangs 'n uitstekende boek verskyn het oor *Rehabilitation after Illness and Accident*¹ wat deur elke dokter gelees behoort te word. Die skrywers, wat elkeen 'n bydrae gemaak het tot die opstel van dié werk, is of was op een of ander tyd verbonde aan die bekende St. Thomas-Hospitaal in Londen. En die onderwerpe waaroor hulle skryf sluit o.a. in emosionele faktore by siekte en rehabilitasie; terugkeer na die werk; rehabilitasie in die algemene medisyne, by borssiektes, by cerebrale toestande, by ortopediese toestande ens. ens.

Die probleme van rehabilitasie en herstel tot die gewone, normale lewenswyse is probleme wat, veral in die tyd waarin ons leef, van groot belang is, nie net vir medici nie, maar ook vir 'n groot aantal werkers op die breëre maatskaplike vlak. Maatskaplike werkers, byvoorbeeld, besef al meer dat rehabilitasiewerk eintlik voorbehoedende gesinswerk van 'n baie positiewe en konstruktiewe aard is. En nyweraars begin al meer die waarde insien van 'n breë, menslike benadering tot die probleme van hul werknemers. In die boek waarna ons verwys het, word gesaghebbende menings uit al die vertakkinge van hierdie belangrike onderwerp saamgebring en met goeie insig en wysheid bespreek.

Almal wat al oor 'n aantal jare in die mediese praktyk staan, is bekend met die uitstekende en omvangryke metodes van fisiese rehabilitasie wat op byna al die gebiede van die medisyne bestaan. Dit is egter belangstelling in die emosionele en persoonlikheidsfaktore wat ons hier veral wil benadruk.

Hulp aan die kind met 'n verlamde polio-been, byvoorbeeld, moet veel verder en dieper gaan as fisiese metodes van benadering. Die seun sal gelei moet word om op konstruktiewe wyse te kompenseer vir die gebrek wat sy manlikheid bedreig. En die dogter met 'n pelvis waarvan die normale verhoudinge versteur is, moet emosionele voorbereiding ontvang vir die vooruitsig van geboorte met disproportie.

Ander voorbeelde van pasiënte wat dikwels groot skade ly aan hul gees en persoonlikheid as gevolg van gebrekkige rehabilitasiepogings, is die pasiënte met verlamming, maar veral afasie, na beroerte. Hierdie mense is uitgelewer aan die spanning en drukte van omstandighede waaroor hulle min beheer het en waaroor hulle alleen en op hul eie nie veel kan doen nie. Tog is daar byna geen einde aan wat werklik gedoen kan word om hulle te help nie—omdat die gees van die mens net soveel behoefte het aan onderskraging as wat sy liggaam behoefte het aan behandeling.

Dokters is oor die algemeen van die besigste mense in die samelewing en groot eise word gestel aan hul tyd en toewyding. Tog verbaas dit mens nog altyd om te sien hoe veel iemand, wat die bykomstige emosionele behoeftes van sy pasiënte in gedagte hou by die behandeling van hul liggaamlike toestande, vermag. Die wêreld sal 'n veel beter plek word om in te lewe, en dit sal 'n belangrike addisionele faset word in die besteding van menslike welstand en geluk, as elke dokter die verantwoordelikhede van omvattende rehabilitasie by siekte as normale deel van sy opdrag as geneesheer aanvaar as plig, maar ook as voorreg.

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AETIOLOGY OF FACIAL CANCER*

A SPECULATIVE AND DEDUCTIVE SURVEY

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In submitting this theory of aetiology we are able to present for consideration observations made on a group of patients seen at the Combined Clinic, Groote Schuur Hospital, which was established in 1948 to deal with the numerous cases of cancer of the face and mouth which were being encountered.

That exposure to the elements, and more particularly to the sun, for many years is necessary for the development of rodent ulcer has long been accepted; it has been called 'sailor's wart' for years. Thus, the face and nose are the commonest sites for its occurrence for they are the most exposed parts right from childhood. The back of the ear is a very exposed part when the head is turned away from the sun and is also a common site of rodent ulcer. The upper eyelid is in shadow under the brow when the eyes are open and rodent ulcer rarely occurs on it; the lower eyelid is not in shadow and it is a very common site of rodent ulcer. The upper lip is shadowed by the nose and the moustache and seldom develops carcinoma, whereas the lower lip, facing upwards, bears the full brunt of solar irradiation and is a common site of sunburn and epithelioma. So, too, are the dorsa of the hands, where similar lesions develop.

Rodent ulcer on the scalp is rare because the hair has a

* A paper presented at the first Congress of the South African Association of Surgeons, Cape Town, April 1958.

shading and protecting effect. We have seen only a few cases in hairy areas; those in the scalp occur almost exclusively in bald men. As baldness only comes on in middle age, the bald scalp is not exposed to the sun for as many years as the face and the hands. Most bald men habitually wear hats to prevent sunburn and both these factors may account for the rarity of rodent ulcer of the scalp.

We are now able to present 1,209 cancers of the face and 470 cases of epithelioma of the lip for consideration. The management of these two groups of cases has already been discussed.^{1,2} Fig. 1 illustrates the prevalence of the varieties of facial cancer, and shows that rodent ulcer is by far the commonest type encountered. Fig. 2 illustrates the relative frequency of rodent ulcer and of cancer of the lip in male and female and in European and Coloured groups. European and Coloured attendances at the hospital are in about equal numbers, so that the disparity in frequency is highly significant.¹ It is believed that the pigment in his skin protects the Coloured person from the noxious effects of solar irradiation, and it seems that pigmentation, no matter how slight—and some of our Coloured patients are very pale indeed—gives almost complete protection from and immunity to basal-cell carcinoma as well as to cancer of the lip and carcinoma of the exposed skin.

Age. The age incidence of rodent ulcer and of cancer of

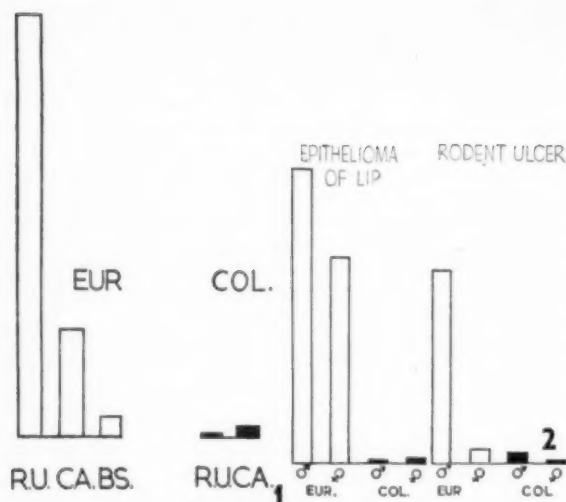


Fig. 1. Varieties of facial cancer showing the very much more frequent incidence in Europeans as opposed to the incidence in an approximately equal Coloured population, and the great preponderance of rodent ulcers over epitheliomas of various kinds within the European group.¹ RU=rodent ulcer. CA=epithelioma. BS=basisquamous carcinoma.

Fig. 2. Relative frequencies of rodent ulcer and of cancer of the lip in 2 large consecutive series of cases.²

the lip is almost the same (Fig. 3). Both occur predominantly in elderly European males of similar diathesis. The typical patient we meet is an Afrikaner farmer, more than 60 years of age, with blue eyes, fair hair and a pale soft skin which does not sunburn and fails to tan. While brown eyes occur occasionally, a sallow complexion rarely accompanies solar keratosis, rodent ulcer and cancer of the lip.

Sex. Relatively few women develop the disease. We attribute this to their more sheltered indoor life and to the

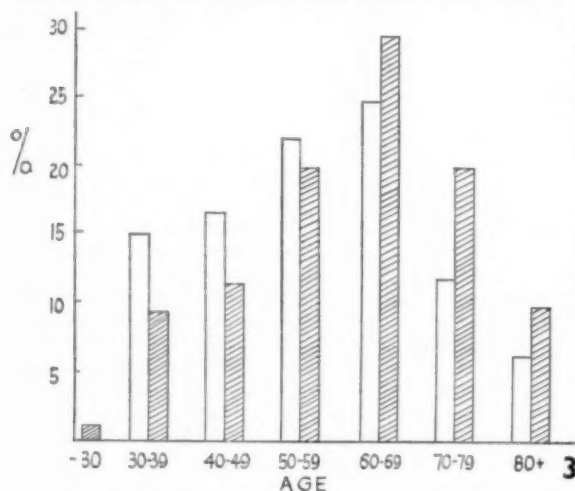


Fig. 3. Age incidence of rodent ulcer (white columns) and cancer of the lip (black columns) showing the similarity in the 2 diseases.^{1,2}

use of face powder and lipstick, even a light application of which is enough to act as a barrier to the harmful wavelengths. In the Coloured population, where the numbers for analysis are much smaller, the sex incidence is reversed. The fact that the Coloured women rarely uses make-up may be a possible explanation of the reversed sex incidence in Coloured people; this subject is at present under examination.

THE MODERN THEORY OF CARCINOGENESIS

It is generally accepted today that carcinogenesis is a multi-stage mechanism. Since the work of Deelman³ has become available, many theories of carcinogenesis have been put forward. Deelman, by a series of experiments, demonstrated that at least 2 factors are essential for the formation of some neoplasms. The neoplasms demonstrated were benign, but equally relevant information soon became available for malignant ones. Deelman showed that if the skin of a mouse was tarred, nothing apparently happened, but if incisions were later made in the tarred (apparently normal) areas, papillomata developed in the lines of the incisions. McKenzie and Rous⁴ showed that the same process could be demonstrated in rabbits, and in explanation it was suggested that the first process was an initiating process, which was long, slow-acting and irreversible. The cell, unaltered in its ordinary appearance and behaviour, is brought into a peculiar sensitized state so that a suitable second variety of stimulus, called the promoting process, causes carcinoma to develop. Both processes are necessary for the formation of tumours.

The theory of this two-stage mechanism has been generally accepted, and much work on the subject has been done. Initiation is not always a somatic-gene mutation, as some have suggested, since Berenblum and Shubik⁵ have shown that a certain powerful mutagen, sulphur-mustard, is by itself not effective in initiating tumours. In general, the theory of the multi-stage mechanism is acceptable.

While most chemical carcinogens show initiatory as well as promoting functions, some are purely promoting, and others again are purely initiatory.

Many theories have been brought forward to explain what is the characteristic property necessary for a promoting stimulus, and it has been suggested that lymphatic obstruction is one of these properties. It has been shown that artificially induced fibrosis augments the action of skin carcinogenesis, and while fibrosis is not essential in some cancers, such as chemically induced liver tumours, it plays an important part in skin carcinogenesis.

THE ANATOMICAL BASIS OF RODENT ULCER

Pathologists are unanimous in believing that basal-cell carcinoma can originate in the basal layer of the glabrous skin or in any of the skin appendages. We submit that the basal-cell carcinoma we ordinarily meet almost certainly originates in the sebaceous glands, and a series of observations will be put forward to support this submission. However, by the time the basal-cell carcinoma has become clinically obvious, its microscopic site of origin can no longer be found. As a consequence, the absolute proof cannot be made in the present state of our knowledge of histological technique, and our statements rest on presumptive evidence only. However, several clinical and experimental observations will be brought forward, which we regard as pointing very strongly to the origin of these neoplasms in the sebaceous glands.

Rodent ulcers are commonest in the 'rodent triangle', an

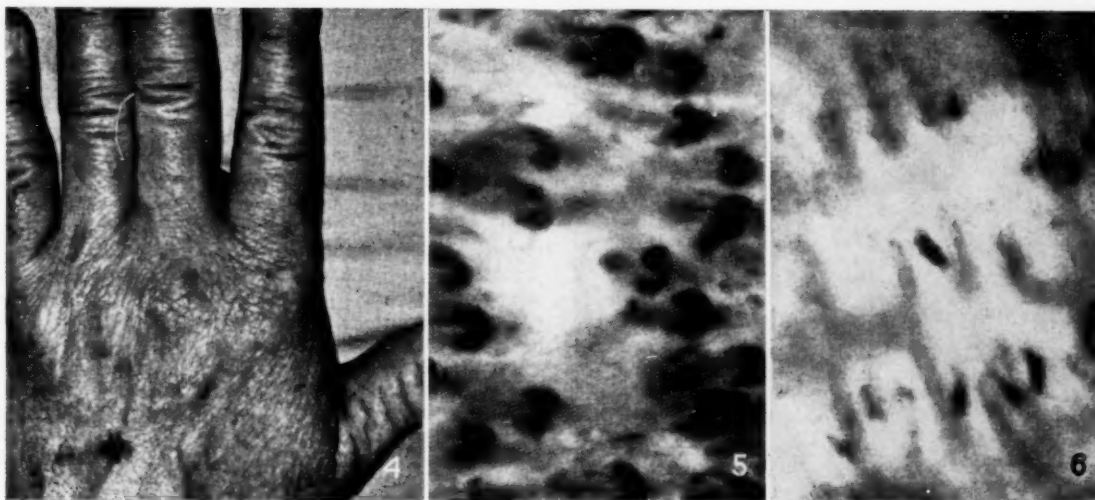


Fig. 4. Dorsum of hand in a patient of typical diathesis showing solar keratosis and epithelioma. Fig. 5. Normal skin of white mouse, showing sebaceous glands (from Bock and Mund,⁸ by kind permission). Fig. 6. Skin of white mouse 24 hours after painting with methylcholanthrene, showing the disappearance of the sebaceous glands (from Bock and Mund,⁸ by kind permission).

area which is bounded by the two palpebral fissures above, and by a line drawn from each external canthus to the upper lip. In all the body, this area is that in which the sebaceous glands are present in greatest numbers.⁶ In the other parts of the face the sebaceous glands, while still frequent, are less common. On the pinna of the ear they are likewise present only in fair concentration, but behind the ear, in the groove between the pinna and the skull, a fair aggregation of these glands seems to occur. Their frequency is so marked in the skin of the rodent triangle that a trained histologist easily learns to recognize whether a portion of skin comes from the face or not by its histological appearance only, mainly because of these numerous sebaceous glands. The frequency of basal-cell carcinoma in these same areas and in about the same relative frequency as the occurrence of the sebaceous glands is surely more than mere coincidence.

Consideration of the histology of the normal skin shows that the pigmented layer lies in the stratum granulosum and a little thought leads to the conclusion that, if pigment protects from the harmful effects of sunlight, the structures that are protected are the ones that lie deep to this pigment layer. These structures are (1) the sebaceous glands, (2) the sweat glands and (3) the hair follicles.

If rodent ulcer arises, as appears to be the case, from a structure that is normally protected from the sun, it must necessarily originate from one of these three structures. Basal-cell carcinoma in a hairy area is exceptionally rare, because the hair has a shadowing effect which protects the skin from direct sunlight, so that although hairy areas are rich in sebaceous glands, each hair follicle being associated with 2 sebaceous glands,⁶ the rarity of rodent ulcer can be explained on this physical fact alone. Sweat glands, again, occur as frequently on the forehead, where rodent ulcer is very rare, as on the rest of the face. It appears, therefore, that it is not the hair follicles or the sweat glands that are the sites of origin of rodent ulcer, but that it is to the sebaceous glands that we must look for the genesis and origin of the

commoner type of rodent ulcer and evidence will be put forward to support this theory.

The same patient that gets rodent ulcer shows solar keratosis on the dorsum of the hands (Fig. 4). This area also shows roughening and develops neoplasms. Here, however, the neoplasms are almost invariably squamous epitheliomas. The number of sebaceous glands on the skin of the hands is not remarkably high.

The lower lip, which presents a mucous and a cutaneous surface, is the frequent site of neoplasms on its cutaneous aspect in people of exactly the same diathesis as those that suffer from rodent ulcer² (Fig. 7). Indeed it is very common to have patients coming up who suffer from both diseases.

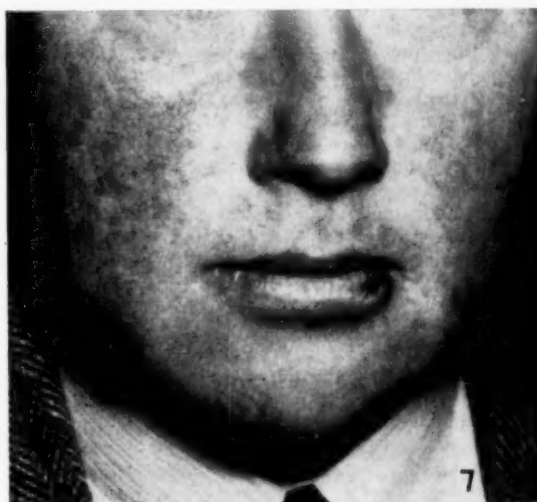


Fig. 7. A patient with the typical diathesis showing solar keratosis and epithelioma of the lip.

On the skin of the lower lip, which is by far the most frequent site of epithelioma, the frequency of sebaceous glands is not at all outstanding and the incidence of rodent ulcer is negligible. Here epithelioma is almost invariably the neoplasm encountered (Figs. 7 and 8).

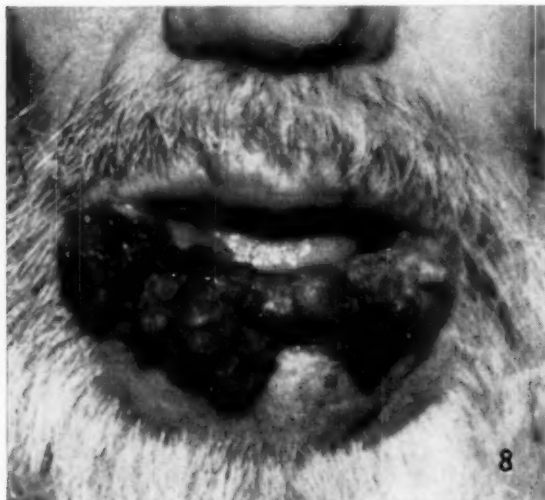


Fig. 8. An elderly bearded man with a typical cutaneous variety of epithelioma of the lip. His lower lip has always been shaved; on this unprotected area he developed an epithelioma of the lip with no solar keratosis elsewhere.

THE SEBAECOUS GLANDS AND NEOPLASMS — EXPERIMENTAL EVIDENCE

Experimental work has shown that neoplasms can be produced in rats by exposing their skin to ultraviolet light or to the sun's rays over a long period.⁷ These neoplasms are usually squamous epitheliomas and it has been noticed that they occur most commonly on the tips of the ears and on the eyelids. In the human, these situations are likewise common sites for actinic neoplasms.

Bock and Mund,⁸ experimenting on white mice, painted their skins with various carcinogenic substances and, using methylcholanthrene, a very potent carcinogen, found that within 24 hours there had been an almost complete disappearance of sebaceous glands from the skin (Figs. 5 and 6). So dramatic and so regular was this response, that these authors have suggested that the suppression of the sebaceous glands from the mouse skin could be used for evaluating the carcinogenic activity of a substance, and they have, indeed, used it for this purpose. In this they confirm Smith *et al.*,⁹ who reported that the carcinogenic properties of a certain petroleum fraction could be predicted by its ability to cause disappearance of sebaceous glands from the mouse skin.

Simpson and Cramer¹⁰ have noted that within minutes of painting mice with methylcholanthrene the carcinogen collected in the sebaceous glands. The same workers¹¹ also demonstrated that solutions of methylcholanthrene in lanolin, which are not carcinogenic, failed to collect in the sebaceous glands in mice, so that concentration in the sebaceous glands follows the carcinogenic activity and is not due to the fatty structure alone. Cambel,¹² repeating this experiment, included the rat and the monkey (in which methylcholanthrene is not a

potent skin carcinogen). Here the suppression of sebaceous glands was not observed even though the hydrocarbon was concentrated in them. It appears therefore, that it is by virtue of their carcinogenic activity that carcinogens which are formed in the skin, or are applied to it tend to become concentrated in the sebaceous glands and selectively affect them. The disappearance and suppression of sebaceous glands from the skin is not permanent; after a while the sebaceous glands reappear and apparently become normal again.¹³ Since this was written, Bock¹⁰ has reported that the 'sebaceous gland suppression is associated specifically with the benzantracene structure rather than generally with all phenanthrene-type carcinogens... within the benzantracene series the parallel between carcinogenic activity and sebaceous-gland suppression is very good'.

Sunlight is well known to act on various sterols and allied polycyclic aromatic hydrocarbons and to alter their chemical constitution. It is thus a commonplace that the ergosterol present in the skin is altered by sunlight to vitamin D₂ and, indeed, this is the explanation commonly accepted for the effect of sunlight in preventing rickets. Vitamin D₃ can also be formed from 7-dehydrocholesterol as a result of the action of sunlight on the skin, and quite recently Peacock¹⁴ has suggested that cholesterol itself may be transformed to methylcholanthrene. If this assertion proves to be true, it appears that the cholesterol which is present in the skin can actually be the precursor of a very potent carcinogen.

THE NORMAL AND ABNORMAL SKIN REACTION TO LIGHT

That sunlight has a carcinogenic effect on the unprotected skin is common knowledge. As stated above, De Kock,⁷ by exposing their skin to sunlight for several hours a day, has produced squamous epithelioma in white rats after some months of such exposure. Epithelioma has been known to develop from ultra-violet irradiation in 'therapeutic' doses, and the wavelengths of the responsible rays has been determined; they lie within the ultra-violet portions of the spectrum.

Normally all brunettes and most blondes develop pigment and tan. This tan is due to the formation of melanin, probably derived from tyrosine by the action of tyrosinase, and the deposition of granules of melanin in the deeper layers of the stratum granulosum; this is the normal reaction. The Coloured races already possess melanin granules in their stratum pigmentosum, but even they show some darkening as a result of long exposure to sunlight. The brunette White man reacts to exposure to the sun by tanning and pigmentation. The Coloured man does not tan, but is protected by his natural skin pigmentation. The blond, blue-eyed White has an imperfect pigment-response to the sun's rays, and fails to tan. Instead, his skin turns red and blisters and, over the years, thickening of the exposed portions of the skin takes place with patchy brownish pigmentation in an obviously imperfect attempt at tanning. Further exposure to the elements results in roughening and dryness of the skin, which has a peculiar dry feel, and clinically there is a notable loss of sebaceous secretion. It is these patients, with a diathesis that affords them no protection against ultra-violet light, who develop rodent ulcers on their face, epitheliomas on their lips and epitheliomas on the dorsum of their hands.

Long before the neoplasms develop the patients show varying degrees of solar keratosis; the skin becomes dry and small painful cracks appear on the projecting portions of the

face, the nose, the cheeks and the ears. There is patchy pigmentation as well, and the cracks heal and constantly break down again; the crusted lesions get traumatized in shaving and the cycle is repeated. It seems that solar keratosis, with its areas of patchy pigmentation, is a *forme fruste* of the frank sun-tan in brunettes. On the lips and on the dorsum of the hands a similar process takes place. Keratosis, however, is represented on the exposed mucosa of the lip by leukoplakia and these lips crack and heal repeatedly. Cigarette smoking additionally traumatizes the lips. The lower lip is 10 times more commonly affected than the upper, because it faces upwards towards the sun and lacks the shade of the latter. Solar keratosis and sunburn are seldom encountered in the upper lip. The dorsum of the hands in these same patients also shows solar keratosis in varying degrees of severity. Neoplasms occur not infrequently, squamous epithelioma being the only type of cancer we have met with in this situation.

ALBINO BANTU

Although albinism is relatively common in the Bantu, we have not had any personal experience with albinos. However, we know that they always succumb at a youthful age, and we can predict that they would suffer from epithelioma of the skin, rodent ulcer seldom, if ever, developing in them.*

The unprotected albino skin is ideal ground for the development of skin neoplasms because in their natural state these people are unclothed and their skin is unprotected from the sun. The skin cancers which develop in these albinos do so in areas of trauma. Rodent ulcer takes many years to develop in Europeans, and it appears that the albino Bantu may not live long enough for this to happen, but dies at a youthful age from epithelioma of the skin. As both the Bantu and the Coloured man are less hirsute than the White man, and so shave less frequently than the European, their faces are not subjected to the same frequent trauma and this may be another reason for the rarity of rodent ulcer on the faces of members of naturally pigmented races.

RECURRENCES AFTER RADIOTHERAPY

Two varieties of recurrences are encountered after radiotherapy. Both varieties are rare and both occur months or years after the initial treatment has been given.

The *marginal recurrence* takes place on the edge of an irradiated area, and is the less uncommon condition. It can be explained as being the result either of an incomplete radiation-dosage at the periphery of the treated area, or of ineffective radiation due to a portion of the original rodent ulcer being protected in a bony foramen.¹⁵ A still more likely explanation is that as radiotherapy confers no immunity to rodent ulcer, another area breaks down in a disease which is notoriously multifocal.

The *central recurrence* cannot be so easily explained. In these cases the full dose of gamma rays has almost certainly

* Mr. S. Kleint, F.R.C.S., Senior Surgeon at Baragwanath Hospital, who has a large experience with albino Bantus, confirms this prediction. The albinos die early of cancer of the skin at a far younger age than our average patients with rodent ulcer. The majority of their epitheliomas occur on the shoulders and the dorsum of the forearms, areas which are exposed to the trauma of braces and other everyday trauma. In his youth and childhood the albino Bantu lives in his kraal in the natural state and completely unclothed, when his skin is exposed to the sun and undergoes the initiatory phase. In early adult life he migrates to the towns, when he acquires clothes.

been delivered and recurrence here—when it is a true recurrence, and not a radiation necrosis—may be due to the persistence of a sebaceous gland more resistant than its neighbours to radiation and to the development of rodent ulcer in this persisting gland. Irradiated areas present as pink, smooth and non-greasy patches, the radiation almost invariably destroying the sebaceous glands together with the other skin appendages.

However, I am informed by our radiotherapists that, while 6,000 r is normally sufficient to destroy most of the sebaceous glands and hair follicles permanently, some of these within the treated area may escape because the destruction is unlikely to be uniformly complete even in the treated area. This is one of the reasons why, while it is possible to get recession of a typical rodent ulcer with a lesser dose than the 6,000 r we usually use, these smaller doses are not usually recommended. The full dose of 6,000 r gives a smooth, clean and satisfactory result, with very much more certain effects. Opinion about this optimum dosage varies among radiotherapists, and I do not feel qualified to enter into this discussion.

SEBACEOUS ADENOMA AND SEBACEOUS CARCINOMA

The 2 pathological entities of sebaceous adenoma and sebaceous carcinoma must be very rare indeed. Our pathologists have been unable to diagnose a single case of either in any of the 2,000 cases of facial tumours sent to them during 1948-57. We have noted that where the clinical diagnosis of sebaceous carcinoma has been made, the histologist's report is almost always squamous epithelioma; the sebaceous adenoma, clinically diagnosed as such, is usually reported to be a chronic infected sebaceous cyst. Sebaceous carcinoma is probably not the usual form of neoplastic degeneration of the sebaceous glands. It appears that our ideas about these two clinical entities may have to be revised. Senile sebaceous adenoma is a rare disease and a separate clinical entity quite unlike rodent ulcer or what used to be classically described as sebaceous adenoma. It is treated with oestrogens,¹⁶ which effect a decrease in the size and number of sebaceous glands, just as androgens have exactly the reverse effect.¹⁷ Experimentally, basal-cell carcinoma can on rare occasions be produced by painting mice with certain polycyclic aromatic hydrocarbons dissolved in an organic solvent.¹⁸ There is still no direct evidence to link sebaceous glands with basal-cell carcinoma, our own evidence being deductive and based entirely on probabilities.

DISCUSSION

To be satisfactory in all respects, a theory of aetiology should explain all problems arising from the condition under consideration. However, since the aetiology of facial cancer, as of cancer in general, is as yet obscure, it is not possible to explain every angle of this disease. The theory we are propounding is as follows:

1. The ultraviolet portion of the sun's rays acts on certain sensitive skins which are not protected by pigment.
2. This lack of pigment permits the rays to reach parts of the skin deep to its pigment layer and to react with some substance to form a carcinogen. The substance is probably a sterol allied to ergosterol or to 7-dehydrocholesterol; it may even be cholesterol itself.
3. This carcinogen, which may well be chemically related to the benzantracenes, is produced in small quantities for

many years and is selectively absorbed and concentrated in the sebaceous glands of the area, whose activity it suppresses. The glands recover¹³ and the cycle is repeated. Ultimately the glands are altered and prepared for the next process.

4. The process so far described is the initiatory process in which the carcinogen acts very slowly and takes many years to produce its effect, which, however, is irreversible; the sebaceous gland may recover macroscopically and microscopically but it has been brought into a sensitive state, and is ready to undergo a malignant change.

5. Another factor, the promoting factor, now comes into operation, causing basal-cell carcinoma to develop. The promoting factor is probably trauma, repeated and minor in nature, such as may be sustained in daily shaving.

6. The effect of these two factors on sebaceous glands is to cause basal-cell carcinoma to develop.

7. In the glabrous skin no concentration of the carcinogen takes place and the initiatory process is diffuse but still restricted to the exposed areas, which become sensitized, and carcinoma can occur on any part of the exposed skin. The neoplastic response of the glabrous skin is with a squamous epithelioma, as opposed to the basal-cell response of the sebaceous gland.

The theory here propounded explains the following points in connection with facial and other actinic skin cancers.

1. The immunity of the pigmented races to rodent ulcer and epithelioma of the lip and hands.

2. The peculiar anatomical incidence of rodent ulcer, which is explained on the basis of the local frequency of sebaceous glands and not on a mystical basis.

3. The occurrence of rodent ulcer many years after the patient has ceased to expose himself to sunlight.

4. The dry rough skin of solar keratosis.

5. The anatomical incidence of epithelioma of solar origin.

6. The sites of occurrence of epithelioma.

7. The rarity of rodent ulcers in albino Bantu.

RECOMMENDATIONS FOR PREVENTION OF ACTINIC CANCERS

It will be obvious from what we have written that to tell a man of 70, who has spent all his life in the open air, to pass his remaining days in the shade and under cover is to tackle this problem at the wrong end; the initiating factor has already done its work and many people who carefully abstain from exposing themselves to the sun, or who emigrate to another country, develop rodent ulcer years later.

It is difficult to know what sort of measures to suggest to prevent a disease whose onset is so slow and insidious and which is so wholly dependent on climatic conditions. It is neither practicable nor possible to insist that the whole population at risk, the most active and responsible members of the outdoor workers in the country, should give up their traditional means of livelihood and take to sedentary and indoor occupations. Wearing hats is very little protection; the wearer even of a broad brimmed hat ordinarily has a well tanned face and lower forehead, only the upper forehead remaining pale and protected.

Hair is to a great extent the natural protection against actinic rays and exercises a marked protective effect by virtue of the shadows it throws. However, even bearded individuals

possess little hair over the rodent triangle, so that the commonest site of rodent ulcers, viz. the highest points of the cheeks and the nose will still be unprotected even in those with a full beard, though a heavy moustache may well protect some from lip cancer. It seems that it may be possible to devise a protection to the face which in the form of a face lotion could be applied daily after shaving and would cause tanning to develop. Such a preparation already exists²⁰ and experiments on its use are now in progress, but the investigation is a long-term undertaking and will require careful control and assurance that the application itself is free from harmful effects.

The following recommendations are made.

1. Since the diathesis can be recognized in childhood, school medical inspectors should be taught to recognise the typical diathesis (fair hair, blue eyes and a soft skin) and be instructed to advise that these children should avoid the sun.

2. Boys with this diathesis should be instructed to use a tanning preparation daily after shaving until the face is well tanned. Thereafter, applications should be made at intervals to keep the depth of tan at a satisfactory level. Girls of this diathesis should use lipstick and a brownish face powder.

3. A vigorous campaign to educate the public about the risks of face and lip cancer should be launched. The danger becomes almost negligible if the disease is managed sensibly and treated in its early stages.^{1,2}

4. Clinics for treatment should be provided in suitable centres.

SUMMARY

1. Rodent ulcer of the face, epithelioma of the lip and epithelioma of the dorsum of the hands are actinic diseases.

2. A theory is put forward that the rodent ulcers originate in sebaceous glands and the epitheliomas in the glabrous skin.

3. The various steps in the process of carcinogenesis are outlined.

4. Some suggestions are put forward which may prevent the development of actinic cancers.

My colleagues of the Combined Clinic have had to listen to much rumination while the various steps in this paper have been worked out. I am grateful to them for their patience. I should also like to thank Drs. J. M. Grieve and L. Mirvish for assistance and advice, Dr. B. Lewis for extracting the data on which Fig. 3 is based, and Mr. B. Todd for preparing the photographs.

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PNEUMOCYSTIS PNEUMONIA

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Since Ammich¹ in 1938 first described 14 cases of the condition known as interstitial plasma-cell pneumonia, a large number of reports have appeared from various European countries describing this severe respiratory disease which affects mainly premature and undernourished infants. In 1952 Vanek and Jirovec² demonstrated in the lungs of their cases of interstitial plasma-cell pneumonia large numbers of parasites, which they identified as *Pneumocystis carinii*, and since then Hamperl³ has confirmed the presence of these parasites in all 7 of Ammich's cases from which slides were still available for examination.

In 1953 Deamer and Zollinger⁴ published a review of the literature on this condition and at that stage the disease seemed to be confined to Europe. However, since then cases have been reported from Britain,^{5,6} the USA,^{7,8} Canada,^{9,10} South America¹¹ and Australia.¹²

To our knowledge no cases of this disease have been reported from Africa and in view of the fact that the condition shows a definite predilection for undernourished infants, it seemed advisable to draw attention to this condition here, because now that it has appeared on the scene, it should theoretically be seen with increasing frequency.

CASE REPORT

A premature Bantu male infant, aged 6 days and weighing 4 lb. 12 oz., was admitted to hospital on 7 January 1958 with the diagnosis of imperforate anus. On the same day a colostomy was done under general anaesthesia. The post-operative course was uneventful and the baby gradually put on weight. On 23 March 1958 he suddenly developed an acute attack of gastro-enteritis with a temperature of 103°F. At the same time slight dyspnoea and cyanosis was noted and on examination he was found to have signs of

pneumonia. Tetrex and penicillin were given and the temperature returned to normal. Subsequently a ventral hernia developed next to the colostomy wound and the child gradually deteriorated and died on 28 March 1958.

Postmortem Findings

Examination 24 hours after death showed a fairly well-nourished but slightly dehydrated and cyanotic Bantu male infant with a colostomy over the middle of the abdomen. Next to the colostomy opening a sausage-shaped hernial sac could be seen hanging over the abdomen. The hernial sac contained approximately an 8-inch segment of congested colon. The imperforate anal canal (± 2 inches) was confirmed and further congenital anomalies, viz. atresia of the left ureter with hydronephrosis, opening of the left jugular vein into the left atrium and an accessory toe on the left foot, were also noted.

The only other significant gross findings were confined to the lungs. There was no pleural reaction or fluid. The cut surfaces of both lungs showed an identical picture, viz. small areas of collapse at their bases and small nodular whitish areas, 1-3 mm. in diameter and more noticeable near the bases of the lungs. The intervening lung tissue was firmer than normal. The bronchi were normal and no pathological changes were noted in the hilar and tracheo-bronchial lymph glands.

Microscopy. Sections of the lungs showed the presence of a patchy interstitial infiltration of numerous plasma cells, some lymphocytes and large mononuclear cells (Fig. 1). The alveoli and alveolar ducts in the affected areas were filled with a faintly eosinophilic, slightly granular material (Fig. 2), which in some areas acquired a distinct honeycomb appearance. Closer inspection revealed the latter areas to

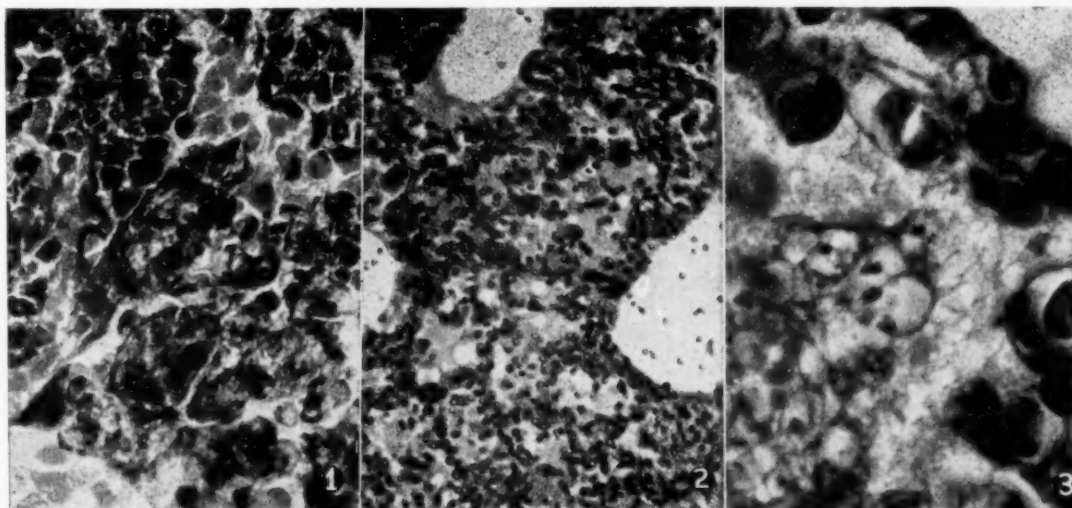


Fig. 1. Section of lung tissue showing interstitial infiltration of inflammatory cells. H & E $\times 40$.

Fig. 2. Eosinophilic granular material filling many of the alveoli in the affected areas. H & E $\times 400$.

Fig. 3. Parasitic cysts with nuclei in one of the alveoli. H & E $\times 900$.

be composed of small parasitic cysts which varied in size and in many of which small nuclei could be seen (Fig. 3). The mucous capsules of these protozoa stained strongly positive with the periodic-acid-Schiff technique. In addition the parasites were also seen in large alveolar phagocytes and in occasional giant cells lying free in the alveoli. Parasites were also present in phagocytes in some of the smaller bronchioli. There was no evidence of inclusion disease or parasites in the other viscera.

DISCUSSION

The various clinical and pathological findings in pneumocystis pneumonia have frequently been discussed in detail over the past few years and, therefore, only the salient features will be reviewed.

Geographical distribution The disease now seems to have a world-wide distribution, but with the highest incidence still in some of the European countries especially Switzerland, Czechoslovakia, Germany, Finland, Austria and Poland. In these countries the disease has on occasion assumed epidemic proportions in hospital wards.

Clinical course. The condition usually starts clinically as a common cold and, in fatal cases, the patients rapidly develop dyspnoea, cyanosis, loss of appetite and die from terminal asphyxia in from a few days to 3 weeks. The majority of cases, however, apparently recover slowly.

There is usually little or no temperature, but a mild leucocytosis has been observed in many cases. Clinically however, there is a well-marked discrepancy between the striking radiological changes and the absence of physical symptoms in the chest. No absolute diagnostic laboratory methods have as yet been devised, but Vivell¹³ and Navratil *et al.*¹⁴ have claimed good results with complement-fixation tests using lung extracts of proven cases.

Predisposing factors. The disease shows a marked predilection for premature and malnourished infants although occasional cases have been described in adults.¹⁵⁻¹⁸ Practically all these adult cases have had some associated disease of the reticulo-endothelial system and, because of this and the presence of agamaglobulinaemia in some of their cases, Bird and Thomson⁶ have suggested that a diminution of gamma globulins also plays a predisposing role. Both sexes are equally affected and there is no seasonal incidence. Baar⁵ believes that infection of the patients with the salivary-gland virus may render them more susceptible to infection with *Pneumocystis carinii*.

Aetiological agent. The majority of workers accept the

protozoal aetiology of this type of interstitial pneumonia. Vanek *et al.*¹⁹ have described the parasite as a round or oval mass of chromatin 1-3 μ in diameter and enclosed in a mucous capsule 5-10 μ in diameter. Reproduction apparently takes place by division into 2, 4, 6 and finally 8 of these spore-like structures in a cyst wall. Absence of suitable test animals and failure to culture the parasites have, however, resulted in differences of opinion on the developmental stages of the parasites and their exact classification. The parasites are also found in the lungs of cats, rabbits, rats, mice, sheep, goats and guinea pigs, where they do not seem to give rise to any lesion.

Pathological findings. Macroscopically, the lungs of the fully developed cases are usually enlarged, heavy and airless, except for areas of compensatory emphysema near the anterior borders. On section the surfaces are moist and solid and the colour may vary from pale red to light yellow or grey. The hilar lymph nodes are apparently not affected. Microscopically the lesions are well demonstrated in the present case and need no further description.

Therapy. Practically all the known therapeutic measures have been tried without any real success.

SUMMARY

The first South African case of *Pneumocystis carinii* pneumonia is described.

The salient clinical and pathological features are briefly reviewed.

This work was supported by a grant from the Council for Scientific and Industrial Research. I am indebted to Prof. J. Barnetson for reading the manuscript and to Mr. G. J. de Swardt for the photomicrography.

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MENTAL HEALTH AND PUBLIC HEALTH*

B. CROWHURST ARCHER, M.D., Durban

Mental illness in its many forms and with all its attendant human suffering and economic loss, is the scourge of the present age. Never in the history of mankind has the physician been called upon to treat so many patients with mental disorder. This is not due to the biological deterioration of our species, as some would have us believe, but it is the result of the radical economic, social and cultural changes that have followed the industrial revolution of the last century. These changes have been accelerated by two World Wars, the disintegration of many European states and the general decline in a belief of the old value-systems. True, modern

* Paper read at annual general meeting of National Group of Neurologists, Psychiatrists and Neuro-surgeons, Durban, September 1958.

civilization is rapidly eradicating the slur of the slums and the ravages of disease, but at the same time it has given rise to 'stress-reactions' of a psychological nature for which no physical cause can be found—a veritable pandemic of neurotic and psychosomatic disorders.

Chisholm¹ has said that there is an acute need for psychological medicine to extend its goals far beyond the mere helping of individuals. Practitioners of psychological medicine must now advance much further into the preventive field and concern themselves with positive mental and social health, which means that their chief interest should now become the prevention of mental and social disability rather than treatment alone.

Here is a stimulating challenge; but, as every experienced

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psychiatrist knows, there are certain dangers in this concept of so wide an application of psychiatric principles; for as Sargent and Slater² have reminded us there is a tendency today to expand its field unduly, and for the psychiatrist to regard himself as a universal expert. Psychiatry is a young science and in many fields where it is being introduced it has more to learn than to teach. The suggestion, however, that the public health services exist to prevent and modify illness and should assume responsibility for the total welfare of their patients, is in keeping with the advance of contemporary science towards a more holistic approach. To this end the words integral medicine, comprehensive medicine and holistic medicine are already in use, but it is hoped that these qualifying terms will not be necessary for long and that the word 'medicine' alone will express the broad meaning. It is hoped also that the term 'public health' will include what today is still referred to separately as 'mental health'.

Now is the time to review briefly some recent world trends in the field of mental health, and then go on to consider the present mental-health facilities and future needs of this country. This is a matter of some urgency at present, for it is important that we should have time to prepare the evidence we may wish to give before the commission of enquiry which it is anticipated will be appointed in the near future to make recommendations for a mental health service for South Africa.

WORLD TRENDS

Institutional psychiatry has developed as an isolated speciality and is somewhat cut off from general medicine. The diagnosis and treatment of neurosis has developed as an offshoot of general medicine and neurology. 'Child guidance' began as an independent movement, insufficiently linked with general medicine—paediatrics—and little related to institutional psychiatry. Testing procedures and vocational guidance have been partly derived from non-medical psychology. These various approaches to the problem of mental ill-health need to be integrated with general medicine and combined into a comprehensive mental health service.

Under the National Health Service in Britain it has been recommended that part-time appointments of all grades should be made to the mental hospitals. It is considered that this will attract doctors to the mental hospital service with keen clinical and research interests and establish close associations with the general hospitals. Thus strengthened it is anticipated that the mental hospital service will undertake diverse extramural activities which will include comprehensive out-patient services, child psychiatry and forensic, criminal and industrial psychiatry. Blacker,³ when planning the psychiatric services in Britain, distinguished between child guidance centres and child psychiatric clinics, the former with non-medical staffs or with a visiting psychiatrist only, the latter under psychiatric direction. There is, however, in this scheme no provision for mental defectives, nor does he make allowances for children under the age of 3 years.

The Social Rehabilitation Unit established by Maxwell Jones⁴ at Belmont in Sussex, England, is of particular interest. The patients consist of the misfits in industry and are admitted from the employment exchanges, but others are referred by psychiatrists and by the Courts. Their stay in hospital is up to a period of 12 months. It is claimed that in this atmosphere of group endeavour the psychopath develops concern about the disturbance his anti-social behaviour has caused in the community, and as his feelings of guilt increase he begins to identify himself with the aims of the Unit.

Roger⁵ has remarked on the increased attention which is being given to recreation and occupational activities in hospitals and pointed out that at Banstead Mental Hospital in England a Medical Research Council team has been supervising an experiment to create a factory within the hospital providing paid employment for patients—according to first reports, with encouraging results. Carse, Panton and Watt⁶ recently described a district mental hospital service which provides out-patient and domiciliary treatment for the coast town of Worthing, England. The effect of this pilot experimental service has, after only 10 months, so reduced the number of admissions to the neighbouring mental hospital that the writers believe that the present problem of 'overcrowding' would be completely resolved if similar services were provided in the rest of the mental-hospital 'catchment area'. Some enthusiasts for this new approach to rehabilitation want no more hospital accommodation to be provided until the effect of these measures has been worked out. Perhaps this is why Quarido's experiments⁷

in the domiciliary care of psychiatric patients in Amsterdam is being followed with such interest.

Another experiment at present being carried out at the Institute of Criminal Psychopaths at Herstedvester in Denmark is also showing encouraging results. Under Section 17 of the Danish criminal law patients suffering from mental disorders other than insanity or mental defect may be sent to this institute on an indeterminate sentence, where their discharge can only be sanctioned by the Court which convicted them. Stürup⁸ has pointed out that difficulties might arise in such an organization because the doctor-patient relationship would be overshadowed by the physician's responsibility to society. But if, as I have suggested elsewhere, it is the background of the establishment rather than the individual doctor alone that is responsible for the success of the experiment, then this criticism is not nearly as important as it would first appear.

Vermooten's succinct and objective report¹⁰ on his visit last year to some of the more important psychiatric clinics and mental hospitals in Britain, Holland and Switzerland confirms that in Europe the therapeutic aim from the outset, when a patient is admitted to a mental hospital, is both medical and social. The socializing measures which are found most effective are centred on a graduated system of remunerative work in company with others. It is stressed that the staff should always work with the patients and that adequate incentives should be provided. The Commissioner drew particular attention to the Report of the Royal Commission on the Law Relating to Mental Illness and Mental Deficiency¹¹ concerning the admission, detention and discharge of mental hospital patients in England and Wales. He said that it was abundantly clear that a complete revision of our Act¹² was essential, and that information would be obtained from other countries regarding their laws on mental disorder and mental defect.

The Report on the Mental Health Needs and Resources of Arkansas, USA,¹³ and what is commonly known as the Stoller Report—the Report on the Mental Health Facilities and Needs of Australia¹⁴—provide us with useful examples of the type of enquiry that is long overdue in this country.

SOUTH AFRICA

Mental Hospital Service

In South Africa the Minister of Health through the Commissioner for Mental Hygiene is responsible for the organization of the Mental Hospital Service. Ten large mental hospitals and 3 institutions for mental defectives are strategically sited in the Union. At present, as elsewhere in the world, the mental hospitals are overcrowded and are below establishment in their medical and nursing staffs. The introduction of the newer methods of physical treatment has greatly reduced the patients' average length of stay in hospital, but this advantage has been outweighed by restricted building during the war, increase in the population, and the greater use of temporary and voluntary certificates by a more enlightened public. The lack of mental-hospital beds therefore still remains an acute problem under the present system.

The extramural work of the Mental Hospital Service is, however, rapidly increasing. Senior physicians of the mental hospitals regularly attend the out-patient diagnostic and treatment clinics of their neighbouring mental health associations. They also provide the consulting psychiatric services for the military hospitals, work colonies and gaols. It is recorded in the 1956 Annual Report of the Commissioner of Mental Hygiene¹⁵ that 388 persons were referred to mental hospitals by the Courts for observation and report, and that evidence was led in Court where necessary. The teaching activities of the Mental Hospital Service has also increased. It includes the undergraduate and postgraduate training in psychiatry of University medical students and psychiatric lectures to University students in psychology, social studies and occupational therapy.

General Hospitals

Since the Second World War the provincial administrations have made some provision for psychiatric out-patient treatment at the general hospitals in the larger centres. These clinics are for the most part under the direction of part-time visiting psychiatrists, who are ordinarily engaged in private consulting practice. A few hospitals are visited by senior physicians of the Mental Hospital Service. In-patient units have been established at the teaching hospitals of the Universities of Cape Town and Pretoria. Tara Hospital in Johannesburg offers both undergraduate and post-

graduate teaching. Provision has also been made in the plans for the new Addington Hospital, Durban, for an out-patient and in-patient psychiatric unit as recommended in the Report of the Commission of Enquiry on Hospital Services in Natal.¹⁶ In the proposed new hospital for Stellenbosch University medical faculty provision has been made for both in-patient and out-patient services. The in-patient section will consist of 31 beds, 15 for Europeans and 16 for non-Europeans. The number of single rooms will be proportionally higher than in the ward units of other departments and will include offices for the medical staff. The EEG room will be designed so that Europeans and non-Europeans can be examined separately. The out-patient department will include a special treatment room, a recovery room and a rest room. To facilitate the instruction of students in psychotherapy, special rooms will be provided with 'uni-directional' glass partitions which enable patients to be seen by the students without embarrassment to either party. Through communication will be by means of a specially designed public address system.

The establishment of Tara Hospital in Johannesburg with its special out-patient facilities is a most interesting development. Moross¹⁷ has described Tara as a special neurosis hospital which fills the gap between the general hospital and the mental hospital for patients suffering from psychoneurosis who are in need of intensive treatment and rehabilitation. Patients, however, who are conspicuous in their behaviour or who are likely to be a disturbing influence are not admitted. This hospital provides an excellent 'day-patient' system which is a compromise between an in-patient and an out-patient service. Provision is made for each patient's individual needs. Some receive ECT or narco-analysis in addition to individual and group psychotherapy. Another important feature of this hospital is the child psychiatric out-patient service. This work is carried out by a team of specialists consisting of a psychiatrist, psychologist, paediatrician, speech therapist, social worker, visiting teachers, and visiting welfare representatives. There is also a close liaison with other medical and surgical specialist services.

Voluntary Associations

The central coordinating voluntary body for the promotion of mental health in this country is the South African National Council for Mental Health. The Council was established in 1920 and for the past 38 years has been actively engaged in an endeavour to familiarize the public with the principles of mental health and concerns itself with the welfare and treatment of those who suffer from mental illness. Both European and non-European sections of the community have been assisted. Affiliated with this organization are mental health societies in Bloemfontein, Cape Town, Durban, East London, Johannesburg, Kimberley, Pietermaritzburg and Port Elizabeth. All these societies maintain out-patient clinics. The national association and the societies receive an annual subsidy from the Government and financial support from the general public.

Numerous organizations are also engaged in mental-health work in particular spheres, viz. those of alcoholism, epilepsy, cerebral palsy, speech defect, marriage guidance and child guidance. There are also numerous other private welfare agencies, some of which have branches throughout the Union, who touch on mental health and employ social welfare officers.

A MENTAL HEALTH SERVICE

Leading South Africans are becoming increasingly aware of their responsibility in regard to mental health and we must therefore be careful not to overstate our case. It may be that psychiatry and psychotherapy have been oversold and we as a profession can never overtake, unaided, the enormous task that confronts us. Roger¹⁸ has said that one effect of the National Health Service in Britain has been to extend the patient's concept of the doctor's responsibility. On the whole, doctors welcome this manifestation of a closer emotional relationship between doctor and patient, so different from what had been expected, in some quarters, from the National Health Service. But now, faced with apparently unlimited medical responsibility, they are asking what the community can do to share the burden which the doctor at present carries by himself.

The problem of mental ill-health may be conveniently divided into prevention, treatment and rehabilitation. The preventive and rehabilitative aspects of the problem should be the responsibility of the public health service, and regional medical officers of

mental health should be appointed by the Commissioner for Mental Hygiene. The function of these psychiatrists should be to co-ordinate and cooperate in all matters of mental health, and especially with the Departments of Education, Social Welfare and Labour, the local authorities, and the various voluntary organizations. The treatment of overt mental illness will always remain the responsibility of the medical profession, although they will need the help of such auxiliary services as psychiatric social workers, non-medical psychologists, and occupational therapists, as part of their team.

The first priority of any mental health service, besides providing good guidance, diagnosis and treatment, is to offer good teaching and training facilities for medical practitioners, nurses and auxiliary workers. The second priority is the needs of the children. Psychiatric treatment must be provided for children with behaviour disorders and for their parents, but the great need is to detect at the earliest possible age subnormality and abnormality which should be taken into account in the child's educational curriculum or home life.

The mental hospitals should retain their key position in any proposed mental health service, and wherever possible they should be raised to the status of teaching hospitals with University affiliation. Part-time visiting medical officers of various grades should be appointed to them, which would relieve the present staff problem and also establish close relations with the general hospital and promote teaching and research. Arrangements should also be made for an interchange between members of the nursing staffs of general hospitals and mental hospitals, because it is only reasonable to expect that all sister tutors and sisters, in teaching hospitals at least, should have some psychiatric experience.

The present overcrowding in mental hospitals could be reduced by the establishment of early-treatment centres, run on similar lines to the Antwerp and Worthing experiments. Centres should be gradually established throughout the Union in the 'catchment' areas of the mental hospitals and provide a small number of beds, a day-hospital out-patient service, and full facilities for domiciliary treatment. A pilot scheme of this kind should be started immediately in Durban. This city is far enough away from the amenities of the neighbouring mental hospitals to have to rely on its own resources and is large enough to do so.

The mental health service should be organized in regional groupings round the mental hospitals and the university medical schools. The importance of specialized mental hospitals should not excuse general hospitals from providing facilities for treating mental illness. Bowman¹⁹ has said that a psychiatric section within the general hospital makes not only the public but also medical and nursing students, and even doctors, think of psychiatry simply as one of the various fields of medicine. Teaching in psychiatry should be on a par with teaching in other specialities and thus make for an all-round medical education. In terms of the Report of the Medical Curriculum Committee of the British Medical Association²⁰ this implies the spreading of the teaching over a longer period, and also the integration of psychiatry with general medicine and the closer association of the teacher of psychiatry with the teachers of the other several subjects.

The department and unit of psychiatry should provide an all-round training in the out-patient clinic and wards. It should also establish, for teaching purposes, a close working relationship with institutions and services outside the unit so as to provide supplementary instruction and teaching material, and should have close links with other university departments dealing with psychology and the social sciences. It is felt, moreover, that the present academic courses given by these university departments need to be supplemented by psychiatric instruction and clinical demonstrations by those engaged in active practice in this field of medicine.

The unit should provide postgraduate training for general practitioners, facilities for intending specialists in psychiatry, and refresher courses, especially in child psychiatry, for those working in the Mental Hospital Service. It should also contribute to the training of social workers, if a school for these were established at the neighbouring university, and of the auxiliary mental services. Its facilities should also be available for health visitors, probation officers, and similar workers.

A children's psychiatric clinic should be an integral part of the teaching psychiatric unit and act in a consultative capacity to the child guidance centres in the region, which it is anticipated will be under the direction of the Department of Education.

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bouring mental hospitals, should be the centre and coordinating focus for psychiatric research in the 'region'.

CONCLUSION

From this brief outline of the magnitude and complexity of the problem of mental health it is clear that before any practical recommendations can be made for the establishment of a mental health service in this country the whole question must be investigated in a scientific and constitutional manner at the highest level.

I must sound a note of warning to those, who believe that objective psychiatry will ameliorate, if not eliminate, mental illness. We should beware of the danger of a false sense of well-being and security—or even superiority—in the use of such words as 'objective' and 'dynamic' and take care to look behind the words into the essence of the meaning of our accepted concepts. What we need today are more facts and fewer loose generalizations, more experimental pilot services and less indiscriminate propaganda; in fact, more research.

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NATIONAL GROUP OF NEUROLOGISTS, PSYCHIATRISTS AND NEUROSURGEONS: ANNUAL GENERAL MEETING, DURBAN, 28-30 SEPTEMBER 1958

The following resolutions were unanimously passed at the Annual General Meeting of the above Group:

- That the fee for psychotherapeutic session should be increased by medical aid societies to 4 gns.
- That a separate charge should be made for visits and for psychotherapy given during a course of ECT in medical aid cases.
- That psychiatrists and general practitioners should continue as at present to give anaesthetics for ECT and the necessity for the services of a specialist anaesthetist should be at the discretion of the psychiatrist.
- That the Presidents of National Groups should have badges of office.
- That special legislation should be introduced to deal with psychopathic personalities and those suffering from alcoholism and drug addiction.
- Psychologists have proved their value as members of the psychiatric team both in child guidance clinics and in hospitals and clinics for adults. But the tendency shown by some psychologists to take over the functions of a doctor and to engage in individual therapy is to be deplored. It is proposed that legislation should be introduced to control unregistered psychologists and those practising as such, including hypnotists.
- That a full-time experienced public relations officer should be appointed to the Head Office staff of the Association and should be available to assist national Groups, local Branches and Congress committees with their publicity problems. Proposed that the organizing secretary of the National Council for Mental Health should act in this capacity for mental health.
- That legislation governing the control of habit-forming drugs and potentially harmful drugs in South Africa should be fully implemented and that the responsible State authorities should institute campaigns against drug addiction. Attention is drawn to the widespread use in this country of agents described as tran-

quillizers and ataraxics; in view of the acceptance of these drugs as potentially habit-forming by responsible international organs such as the WHO Expert Committee on Addiction-producing Drugs, the State is urged to subject these agents to international control and the terms of the existing legislation.

9. That a medical aid scheme should be introduced for medical practitioners and their families.

10. That a commission of enquiry should be appointed with the following terms of reference:

(a) To report on the present mental health facilities and future needs of the Union of South Africa.

(b) To draw up a comprehensive programme for a mental health service for the Union and make recommendations for implementing both long- and short-term policies, in order of their priorities.

(c) To make recommendations for coordinating the services of government departments, local public health authorities and the various voluntary organizations concerned with the prevention, treatment and rehabilitation of mental ill-health.

(d) To make recommendations for the provision of teaching and training facilities for psychiatric auxiliary personnel—psychologists, social workers, occupational therapists, health visitors, probation officers and allied workers.

(e) To make recommendations for the consideration of the S.A. Medical and Dental Council on the better integration of psychiatry into the general medical curriculum and the desirability of all newly qualified practitioners' holding a resident appointment in a mental hospital for at least 3 months as part of their compulsory internship.

(f) To make recommendations for consideration of the S.A. Medical and Dental Council on the academic qualifications, experience and ethical standards necessary for registration by the Council of all psychiatric auxiliaries who have to deal with patients.

COLLEGE OF PHYSICIANS, SURGEONS AND GYNAECOLOGISTS OF SOUTH AFRICA

The following candidates have been successful in the College Examinations:

Fellow of the College of Surgeons, Part 1

Dr. Barnett Angorn
Dr. Louis Gecelter
Dr. Lucas Carl Jansen van Rensburg
Dr. Rene Denyssen le Roux
Dr. Johannes Stephanus Marais

Fellow of the College of Physicians

Dr. Walter Hift
Dr. Hymie Louis Nossel

Diploma in Midwifery

Dr. John Henry Bristow
Dr. James Peter Byrne
Dr. Josephus Jacobus de Jager
Dr. Atties Fourie Malan
Dr. William Anthony Brooksbank Roberts

Dr. Gerald Stein
Dr. Dinker Waghmarae

Fellow of the College of Obstetricians and Gynaecologists

Dr. Solomon Burgin
Dr. David Friedberg
Dr. Heide Katharina Lodemann
Dr. Desmond Kluge Quinlan
Dr. Maurice Ashley Renton
Dr. John Monteith Samson

OFFICIAL ANNOUNCEMENT : AMPTELIKE AANKONDIGING

APPOINTMENT OF EDITOR

Applications are invited from medical practitioners for the post of Editor in the service of the Medical Association of South Africa at its Head Office in Cape Town.

The salary scale attaching to the post is £1,800×60—2,400 plus cost-of-living allowance of £176 for single men and £352 for married men.

The successful applicant must contribute to the Association's Superannuation Fund and will be expected to assume duty on 1 January 1959.

Applications must reach the Secretary, Medical Association of South Africa, P.O. Box 643, Cape Town, before 31 October 1958.

A. H. Tonkin
Secretary

Medical House
Cape Town
6 October 1958

AANSTELLING VAN REDAKTEUR

Aansoek word ingewag van mediese praktisyns om die betrekking van Redakteur in die diens van die Mediese Vereniging van Suid-Afrika by die Hoofkantoor in Kaapstad.

Die salarisskaal aan die betrekking verbonde is £1,800×60—2,400 plus 'n duurtetoelag van £176 vir ongetroude mans en £352 vir getroude mans.

Die suksesvolle applikant moet bydra tot die Vereniging se pensioenfonds en dit sal verwag word dat hy op 1 Januarie 1959 diens aanvaar.

Aansoek moet die Sekretaris, Mediese Vereniging van Suid-Afrika, Posbus 643, Kaapstad, voor 31 Oktober 1958, bereik.

Mediese Huis
Kaapstad
6 Oktober 1958

A. H. Tonkin
Sekretaris

THE PROFESSIONAL PROVIDENT SOCIETY OF SOUTH AFRICA

The Professional Provident Society has published the following statement concerning two new optional benefits that have been offered to its members, viz. group life insurance and a hospitalization scheme.

The outstanding success of the Society, which is advancing from strength to strength, has encouraged the Board to investigate the possibility of extending its scope to meet further needs of professional persons. These investigations have resulted in the addition of two further outstanding optional benefits to the unsurpassed incapacity and provident fund benefits already offered to the following professional organizations: The Dental Association of South Africa, the Medical Association of South Africa, the Pharmaceutical Society of South Africa, the Societies of Advocates of South Africa, the Association of Law Societies of South Africa, the South African Veterinary Medical Association, the Central Council of Land Surveyors of the Union of South Africa.

Acting on the authority given it by the 1958 Annual General Meeting, the Board has successfully concluded negotiations for a Group Life Assurance Scheme and also a Hospitalization Scheme. The following are very brief summaries of these schemes, both of which come into operation on 1 November 1958 and are open to all members of the Society.

1. *Group Life Assurance Scheme.* It is the haunting fear of any man with a sense of responsibility that he may leave his dependents in financial straits, and the most pressing, immediate need is to make adequate provision for them in the event of his death, for a reasonable annual outlay. The cheapest form of security is provided through group assurance, and the Society, guided by its actuaries, has accepted a tender for underwriting such a scheme, submitted by the South African National Life Assurance Company Ltd. The scheme evolved incorporates particularly attractive benefits at remarkably low premium rates. It enables existing members who enlist within 3 months from inception of the scheme to do so without being called upon to submit proof of insurability—an exceedingly valuable concession to those who have left their youth behind them. This concession is extended to 12 months in the case of those who join the Society after inception of the Scheme. Membership of the Scheme may continue after the age of retirement from membership of the Society is reached, subject to certain rules of the scheme. The sum assured is in each

case related to the number of shares or units of membership held, the member having a choice of subscribing for £20 or multiples thereof to a maximum of £100 for every share held. The maximum sum assured for a member holding the maximum of 50 shares is therefore £5,000. The present premium rate at $\frac{1}{2}$ per cent per month is equivalent to £7 10s. per £1,000 per annum or a mere £37 10s. per annum for £5,000. The Scheme allows for allocation of any profits to the Society and the Board has power to distribute such profits. For certain purposes such as study loans and partnerships, benefits under the scheme may be ceded to the Society, which will consider providing guarantees on behalf of the member.

2. *Hospitalization Scheme.* This scheme has been devised to assist members in meeting the not inconsiderable costs involved in hospitalization both for themselves and their dependents. Cover is immediate, and no proof of insurability will be required for existing members and new members of the Society who join within 3 months of joining the Society. The Society shall pay to the member an allowance of £2 per day of stay in hospital or nursing home or illness at home under medical supervision with a registered nurse in attendance, subject to a maximum of 200 benefit days for a married man and his family and 100 benefit days for a single member, during any membership year. A special polio benefit, including certain medical expenses up to a maximum of £1,000 in any membership year, arising after at least one year's membership, is provided. The abovementioned allowance will be allowed in respect of maternity if this shall arise at least 6 months after commencement of membership. The subscription rates are 4s. 0d. per month for a single member and 10s. 0d. per month for a married member regardless of the number of dependents. Provision is made for membership to continue at slightly increased cost after reaching the Society's retirement age, and in the event of the death of a male member, his dependents may continue membership at reduced cost. This scheme might be extended in due course, to embrace a full medical insurance scheme.

Both these optional additional benefits offer remarkable value to members, be they very young or already nearing retirement age, and existing members should take immediate steps to secure their participation. Those who are not yet members of the Society should not delay in availing themselves of the very wide measure of security afforded by membership; enquiries should be addressed to the Secretary, P.O. Box 6268, Johannesburg.

THE S.A. MEDICAL AND DENTAL COUNCIL : ELECTION OF MEMBERS

The Returning Officer (Mr. Wm. Impey) has issued the following statement under date 26 September 1958:

Notice is hereby given, pursuant to the provisions of the First Schedule of the Medical, Dental and Pharmacy Act, 1928, as amended, that an election of 10 medical and 4 dental members of the South African Medical and Dental Council to serve during the period expiring on the 31st day of December, 1963, is about to be held.

Nominations of eligible persons to fill the vacancies are invited.

The following are eligible for nomination:

(a) *For Medical Members of the Council.*—Every registered medical practitioner resident in the Union.

(b) *For Dental Members of the Council.*—Every registered dentist resident in the Union.

Each candidate must be nominated by a separate nomination paper, but any person entitled to vote at the election may sign the nomination paper of any number of candidates not exceeding the number to be elected and for which he is entitled to vote.

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Every nomination paper must state the christian name in full and surname of the candidate nominated, and must be signed by not fewer than two registered medical practitioners or dentists (as the case may be), and also by the person nominated under a statement that he consents to be nominated, and the address as registered with the Council and registered qualifications of each one so signing must be appended to his signature. If the person nominated is unable to sign the nomination paper he may inform the returning officer by letter or telegram that he consents to be nominated.

Every nomination paper must reach the Returning Officer at

P.O. Box 205, Pretoria (or 310 Maritime House, 155 Pretorius Street, Pretoria) not later than 4 p.m. on 20 October 1958, from whom forms of nomination papers may be obtained on application.

Each candidate for election shall deposit with the Returning Officer not later than the day appointed for receiving nominations an amount of £15, which deposit shall be returned to him if the provisions mentioned in Proclamation No. 51 of 1938 are fulfilled.

Every nomination paper in respect of which any of these provisions has not been complied with, or which is not received by the aforesaid date at the address stated below, will be invalid.

COLLEGE OF GENERAL PRACTITIONERS : KOLLEGE VAN ALGEMENE PRAKTIKSYNS

At a meeting of the Executive Committee of the National General Practitioners' Group which was held in Pretoria on 30 September 1958, and was attended by representatives from the Free State, Natal, Transvaal and the Cape Province, it was resolved in principle to establish a college of general practitioners. It is intended that the college shall consist of various faculties, as described and recommended by Dr. Ian Grant. This announcement is made by the Group for the information of all members of the Medical Association of South Africa—general practitioners as well as specialists—in the sincere hope of obtaining the cooperation and goodwill of all. Further particulars regarding membership will be published in due course in the *South African Medical Journal*.

Die Uitvoerende Komitee van die Nasionale Algemene Praktisyngroep het op 30 September 1958 in Pretoria ontmoet. By hierdie vergadering, waar verteenwoordigers van die Vrystaat, Natal, Transvaal en die Kaapprovinsie teenwoordig was, is in beginsel besluit om tot die stigting van 'n kollege van algemene praktisyne oor te gaan. Die bedoeling is dat die kollege sal bestaan uit verskeie fakulteite, soos deur dr. Ian Grant uiteengesit en aanbeveel is. Hierdie aankondiging word deur die Groep gemaak vir die informasie van alle lede van die Mediese Vereniging van Suid-Afrika—aan algemene praktisyne sowel as spesialiste—in die opregte verwagting om die samewerking en welwillendheid van almal te verwerf. Verdere besonderhede insake lidmaatskap sal mettertyd in die *Suid-Afrikaanse Tydskrif vir Geneeskunde* aangekondig word.

PASSING EVENTS : IN DIE VERBYGAAN

Northern Areas Division, Cape Western Branch, Medical Association of South Africa. A business meeting of the Division will be held in the Old Council Chamber, Klosser Street, Parow, Cape, at 8.15 p.m. on Thursday 23 October.

Dr. Loyce Hillman, M.B., B.Ch., D.A. (Rand) has commenced specialist anaesthetic practice in partnership with Dr. Morris Fisher and Dr. Stanley Hersch at 162 Lister Buildings, Jeppe Street, Johannesburg. Telephone 22-3444 and 44-6111.

Dr. W. P. U. Jackson, recently returned from Europe and the USA, will give an informal talk on his overseas trip, with special reference to Endocrine research, at a meeting to be held in the large A-floor lecture theatre, Groote Schuur Hospital, Cape Town, on Tuesday 14 October 1958 at 12 noon. All interested are invited to attend.

Dr. P. A. Johnson, D.O.M.S. (R.C.P. & S.I.), D.O. (R.C.P. Lond., R.C.S. Eng.) has started in specialist practice as an Ophthalmic Surgeon at Provident Assurance House (14th Floor), Cor. Smith and Field Streets, Durban. Telephones: Rooms 68854, residence 81471.

The Council for International Organizations of Medical Sciences (established under the auspices of WHO and UNESCO) has supplied this *Journal* with a calendar of international medical congresses that are to be held during the remainder of 1958 and in 1959, 1960, and 1961. The Editor will be pleased to supply any enquirers with information obtainable from this calendar.

Experimental Research into Problems of Aging. Candidates wishing to submit entries for the 1959 Ciba Foundation Awards for papers descriptive of research relevant to basic problems of aging are

reminded that these must reach The Ciba Foundation not later than 10 January 1959. Information about the Awards, for those not already aware of the conditions, may be obtained on application from Dr. G. E. W. Wolstenholme, Director, and Secretary to the Executive Council, Ciba Foundation, 41 Portland Place, London W.1.

Union of South Africa, Department of Health. Newsletter No. 39 of 1958. Notification of formidable epidemic diseases and poliomyelitis in the Union during the period 19-25 September 1958.

Plague, Smallpox, Typhus Fever. Nil.

Poliomyelitis

	Eur.	Nat.	Col.	As.	Total
Transvaal ..	—	—	—	—	—
Cape Province ..	2	2	—	—	4
Orange Free State ..	—	—	—	—	—
Natal ..	—	2	—	—	2
Totals ..	2	4	—	—	6

Local Authorities

		Eur.	Non-Eur.
<i>Cape Province:</i>			
Cape Town Municipality ..	U	1	—
Grahamstown municipality ..	U	—	1
Port Elizabeth municipality ..	U	1	—
Umtata district ..	R	—	1
<i>Natal:</i>			
Pinetown district ..	R	—	1
Tugela district ..	R	—	1

U=Urban R=Rural

NEW PREPARATIONS AND APPLIANCES : NUWE PREPARATE EN TOESTELLE

DISTRICT VITAMIN-B12 PEPTIDE COMPLEX TABLETS

British Drug Houses announce this preparation for oral administration and supply the following information:

Distivit Vitamin-B12 Peptide Complex Tablets have proved clinically to be as effective as injection of crystalline vitamin B12.

Composition. It is a purified peptide complex of vitamin B12

obtained from deep fermentation culture of suitable micro-organisms and marketed in tablet form for oral administration. (It is not a mixture of cyanocobalamin with an intrinsic factor or other so-called absorption additives and should not be confused with such preparations.)

Strengths. 'Distivit' 20: Each scored tablet contains 20 micrograms of combined vitamin B12 in the form of a peptide complex.

'Distivit' 100: Each scored tablet contains 100 microgrammes of combined vitamin B12 in the form of a peptide complex.

Indications. For reliable oral administration and efficient absorption in pernicious anaemia, all other macrocytic anaemias and conditions of debility, where previously treatment was only effectively and consistently achieved with crystalline vitamin B12 by the parenteral route.

Recommended Dosage. *Pernicious Anaemia:* Initial treatment: One 100 microgramme tablet 3 times daily for 10 days followed by one 100 microgramme tablet daily until blood count returns to within normal limits (normally within one or two months). Maintenance therapy for most cases: 20 microgrammes daily. *Other Anaemias:* One 100 microgramme tablet daily until remission is complete. *Debility:* One 20 microgramme tablet twice daily between meals.

Manufactured by the Distillers Company (Biochemicals) Ltd., London and Liverpool, England.

Distributed by British Drug Houses (South Africa) (Pty.) Ltd., P.O. Box 372, Johannesburg.

Packings. 'Distivit' 20, 20 microgramme tablets: Tube of 25 and bottle of 100. 'Distivit' 100, 100 microgramme tablets: Bottle of 100 and bottle of 500.

For detailed information see literature.

SANDOSTEN^(R) NASAL SPRAY

Sandoz Ltd., announce the addition of Sandosten Nasal Spray to their range of Sandosten (thelalidine) preparations, and supply the following information.

Sandosten (thelalidine) contains thelaldine digluconate 0.5%, calcium lactobionate 17.5%, and ephedrine HCl 0.9%. It is a powerful antagonist of both histamine and acetylcholine, with a pronounced action on cell and capillary permeability. Calcium lactobionate (Calcium Sandoz) potentiates the effect of Sandosten and virtually eliminates side-effects. Ephedrine ensures rapid decongestion of the nasal mucosa. The use of this combination in form of a nasal spray has been found very effective in cases of rhinitis.

Indications. Hay fever; allergic and vasomotor rhinitis.

Application. Remove the cap from the nebulizer, insert the nozzle into the nostril, and squeeze slowly but firmly. After allowing the nebulizer to fill again completely with air, repeat the procedure in the other nostril. One spray in each nostril is sufficient, but the application may be repeated several times a day.

Presentation. Plastic nebulizers containing 10 ml. of solution. The nebulizers are only partially filled to ensure proper spray action.

Distributors. Alex. Lipworth Ltd., P.O. Box 4461, Johannesburg, P.O. Box 4838, Cape Town, P.O. Box 1988, Durban, and P.O. Box 3188, Port Elizabeth.

SYNTOCINON^(R) (SYNTHETIC OXYTOCIN)

Sandoz Ltd., announce the introduction of Syntocinon (synthetic oxytocin), and supply the following information. Syntocinon is the first synthetic polypeptide (octapeptide) hormone available commercially. It is chemically identical with the oxytocic hormone of the posterior pituitary, but instead of being isolated from animal posterior pituitary glands, it is entirely synthetic. This ensures the absence of even traces of vasopressor hormone and of foreign proteins. Pharmacological and clinical investigations have shown Syntocinon to be identical in its oxytocic effect to natural oxytocin B.P. Syntocinon is standardized biologically.

Properties. Syntocinon exerts a selective action on the smooth

musculature of the uterus, particularly towards the end of pregnancy, during labour and immediately following delivery. It provokes rhythmic contractions of the uterus, increases the frequency and amplitude of existing contractions, and raises the tone of the uterine muscle. The blood pressure is not affected, so that Syntocinon may be used without risk in hypertensive toxæmic patients.

Indications and dosage are as follows:

	Intravenous drip	Intravenous injection	Intramuscular or subcutaneous injection
Induction of labour at term	1 I.U. in 100 ml. of 5% glucose solution at the rate of 8-40 drops per minute or more according to the effect	—	0.5-2 I.U. repeatable every 30-60 minutes.
Hypotonic uterine inertia			0.25-1 I.U. repeatable as required.
Postpartum haemorrhage*	1-2 I.U. per 100 ml. 5% glucose solution. Rate of drip may be faster than above.	5-10 I.U.	5-10 I.U.

*In this indication a more prolonged action is exhibited by ergot alkaloids (Methergin, Gynergen, Neo-Gynergen; q.v.).

Presentation. Ampoules of 5 units in $\frac{1}{2}$ ml. boxes of 6. Ampoules of 10 units in 1 ml. boxes of 6.

Distributors. Alex. Lipworth Ltd., P.O. Box 4461, Johannesburg, P.O. Box 4838, Cape Town, P.O. Box 1988, Durban, and P.O. Box 3188, Port Elizabeth.

References

Bainbridge, M. N. et al. (1956): Brit. Med. J., 1, 1133.
Francis, H. H. and Francis, W. J. A. (1956): *Ibid.*, 1, 1136.

COBADERX

British Drug Houses have introduced Cobadex Ointment, which contains hydrocortisone B.P.C. 1% in a water-repellent base. They supply the following information.

Indications. The special usefulness of Cobadex Ointment lies in the base in which the hydrocortisone is incorporated. The water-repellent properties of this base render the ointment particularly suitable for the treatment of contact dermatitis. The healing continues under the protective barrier. The risks from further contact with the irritant agent are diminished, even when the patient must again be exposed to the irritant before healing of the lesions is complete. Clinical trials have shown Cobadex Ointment to be particularly beneficial in the following circumstances:

1. Occupational dermatitis in the convalescent stage in patients who would be able to return to work but who without Cobadex would run the risk of coming into casual contact with the irritant to which they had reacted.

2. Eczema in the housewife, especially in those women who have shown some degree of recovery, but who are forced to return to their housework before recovery is complete. The ointment, however, should not be used on raw, weeping surfaces because it tends to hold back any exudate. The area of skin around the eye should be avoided.

Owing to its formulation Cobadex Ointment is strongly indicated for use in conditions such as napkin rash and intertrigo, in dry inflammatory pressure areas, and to form a barrier against the irritation and excoriation appearing around a colostomy or ileostomy opening or a sinus from the site of an operation.

Mode of Issue. Cobadex Ointment containing hydrocortisone B.P.C. 1%, in a water-repellent base. Tubes of 10 grammes.

REVIEWS OF BOOKS : BOEKRESENSIES

OPERATIVE OBSTETRICS

Munro Kerr's Operative Obstetrics. 6th Edition. By J. Chassar Moir, Hon. LL.D. (Queen's University, Ontario) M.A., M.D., F.R.C.S. (Ed.), F.R.C.O.G. Pp. x + 1008. 402 Illustrations 4 colour plates and a frontispiece portrait. 105s. London: Baillière, Tindall and Cox Ltd. 1956.

J. Chassar Moir is to be congratulated on the 6th edition of *Operative Obstetrics*. He has brought the book up to date without altering its character and the discursive style of writing of the

earlier editions has been retained. The type is excellent, many new illustrations have been added and the text, enlivened by case histories from the author's own experience, is a pleasure to read.

The subject matter covers the difficulties that may be encountered by anyone practising active obstetrics. The approach to, and the best method of resolving these difficulties, are discussed with reference to the author's experience and that of other workers. The generous inclusion of references throughout the text is invaluable.

The book is entirely up to date; most noticeable is the increased scope of Caesarean section. Many of the older manoeuvres have

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been discarded but it is interesting to note that the metre mynter, or Vorhee's bag, still has a place. The writer is careful to discriminate between those manoeuvres which the operator may be forced to carry out in an emergency and those which are the treatment of choice in a fully equipped hospital.

D.M.

SKULL FRACTURES

Injuries of the Bones of the Head. An Atlas of Clinical and X-Ray Diagnosis. By J. Vondra, M.D. and R. Bláha, M.D. Pp. 304. 170 Illustrations. 40s. net. London: Constable and Company Ltd. 1958.

The authors introduce this book as an attempt to present to the general practitioner the signs of injury to the bones of the skull. The book is described as an atlas of clinical and X-ray diagnosis. In the latter section, consisting of illustrations, the fractures are well demonstrated and described, the important points made being the occasional necessity for tangential and tomographic films for detection of some fractures.

The first section, describing the clinical aspects, unfortunately makes difficult reading—the translation, the use of German and

Latin terms and the not infrequent spelling errors, being mainly responsible. An attempt is made to correlate the clinical and radiological findings but the authors realize the difficulties of this and conclude that the doctor must carefully and minutely study the history, the mechanism of injury, the clinical signs and the radiological evidence before he chooses the mode of treatment.

One would be prepared to accept this book as a small atlas of radiologically demonstrated fractures of the bones of the skull, but not for its clinical value.

A.G.

FORENSIC MEDICINE

Forensic Medicine. 3rd Edition. By Keith Simpson, M.D. (Lond.). Pp. viii + 352. 138 Figures. 30s. net. London: Edward Arnold (Publishers) Ltd. 1958.

This book is for medical students. It is concise, interesting and easy to read, but the views expressed on problems such as homosexuality are somewhat questionable. The book contains a great deal of useful information, but the legal information concerns the English law, and not the South African. Its use for South African students and practitioners is, on this account, limited.

A.S.

BOOKS RECEIVED : BOEKE ONTVANG

The Year Book of Dermatology and Syphilology. 1957-58. Edited by Rudolf L. Baer, M.D. and Victor H. Witten, M.D. Pp. 492. 64 Figures. \$8.00. Chicago: Year Book Publishers, Inc. 1958.

The Year Book of Orthopedics and Traumatic Surgery. 1957-58. Edited by Edward L. Comper, M.D., F.A.C.S., F.I.C.S., with a Section on *Plastic Surgery*. Edited by Neal Owens, M.D., F.A.C.S., F.I.C.S. Pp. 463. 228 Figures. \$7.50. Chicago: Year Book Publishers, Inc. 1958.

The Year Book of Endocrinology. 1957-58. Edited by Gilbert S. Gordan, M.D., Ph.D., F.A.C.P. Pp. 381. 79 Figures. \$7.50. Chicago: Year Book Publishers, Inc. 1958.

Manual of Medical Emergencies. 3rd Edition. By Stuart C. Cullen, M.D. and E.G. Gross, M.D. Pp. 302. 41 Figures. Chicago: Year Book Publishers. 1958.

British Postgraduate Medical Federation, University of London. Lectures on the Scientific Basis of Medicine. Volume VI. 1956-57. Pp. ix + 393. Illustrations. 45s. net. London: University of London, The Athlone Press. 1958.

Fractures and Dislocations. By George Perkins, M.C., M.Ch., F.R.C.S. Pp. viii + 363. 255 Figures. 57s. 6d. London: University of London, The Athlone Press. 1958.

A Symposium on Non-Toxaemic Hypertension in Pregnancy. Edited by Norman F. Morris, M.D., M.B., B.S., M.R.C.O.G. and J. C. McClure Browne, B.Sc., M.B., B.S., F.R.C.S. (Edin.), F.R.C.O.G. Pp. xii + 243. 78 Illustrations. 35s. net. London: J. & A. Churchill Ltd. 1958.

The Kidney. An Outline of Normal and Abnormal Structure and Function. By H. E. de Wardener, M.B.E., M.D., F.R.C.P. Pp. viii + 338. 74 Illustrations. 45s. net. London: J. & A. Churchill Ltd. 1958.

The Physical Treatment of Varicose Ulcers. A Practical Manual for the Physiotherapist and Nurse. By R. Rowden Foote, F.I.C.S., M.R.C.S., L.R.C.P., D.R.C.O.G. With a Section on *Electrical Adjuncts to Treatment*. By Miss T. Wareham, M.C.S.P. Pp. xii + 126. 88 Illustrations. 15s. net + 1s. 1d. Postage Abroad. Edinburgh and London: E. & S. Livingstone Ltd. 1958.

Neoplastic Disease at Various Sites. General Editor: D. W. Smithers, M.D., F.R.C.P., F.F.R. Volume I.

Carcinoma of the Lung. Edited by J. R. Bignall, M.D., M.R.C.P. Pp. xii + 298. 62 Figures. 55s. net + 2s. 1d. Postage Abroad. Edinburgh and London: E. & S. Livingstone Ltd. 1958.

Autonomic Imbalance and the Hypothalamus. Implications for Physiology, Medicine, Psychology, and Neuropsychiatry. By Ernst Gellhorn, M.D., Ph.D. Pp. xiv + 300. 101 Figures. English Price, approximately 48s. Minneapolis: University of Minnesota Press. 1958. Local Distributors: Oxford University Press.

Neomycin. Its Nature and Practical Application. Edited by Selman A. Waksman. Pp. x + 412. 41 Figures. 40s. London: Baillière, Tindall and Cox Ltd. 1958.

Diseases of the Liver and Biliary Systems. 2nd Edition. By Sheila Sherlock, M.D. (Edin.), F.R.C.P. (Lond.), M.R.C.P. (Edin.). Pp. xvi + 719. 213 Figures. 57s. 6d. Oxford: Blackwell Scientific Publications. 1958.

Circulation. Proceedings of the Harvey Tercentenary Congress held on June 3rd to June 8th 1957 at the Royal College of Surgeons of England, London. Edited by John McMichael, M.D., F.R.C.P., F.R.S. Pp. xxiii + 503. Illustrations. 50s. Oxford: Blackwell Scientific Publications. 1958.

Blood Groups in Man. 3rd Edition. By R. R. Race, Ph.D., M.R.C.S., F.R.S. and Ruth Sanger, Ph.D., B.Sc. Pp. xix + 377. 31 Figures. 42s. Oxford: Blackwell Scientific Publications. 1958.

Ocular Allergy. By Frederick H. Theodore, M.D. and Abraham Schlossman, M.D. With chapters by William B. Sherman, M.D. and Roberts S. Coles, M.D. Pp. xviii + 420. 111 Figures. 96s. London: Baillière, Tindall and Cox Ltd. 1958.

The Measurement and Appraisal of Adult Intelligence. 4th Edition. By David Wechsler. Pp. ix + 297. 40s. London: Baillière, Tindall & Cox Ltd. 1958.

Die Infektionskrankheiten des Menschen und ihre Erreger. In zwei Bänden. Herausgegeben von Prof. Dr. A. Grumbach und Prof. Dr. W. Kikuth. xxii + 1,702 Seiten. 56 Abbildungen. Ganzleinen DM 198.00. Stuttgart: Georg Thieme Verlag. 1958.

Dermatologie und Venerologie: einschliesslich Berufskrankheiten, dermatologischer Kosmetik und Andrologie. In 5 Bänden. Herausgegeben von Prof. Dr. Dr. h.c. H.A. Gotttron und Prof. Dr. Dr. h.c. W. Schönfeld. *Band II. Teil I.* Physikalische Behandlung—Dermatologische Kosmetik—Krankheiten noch unbekannter Herkunft nach ihrer Morphologie I—Bearbeitet von zahlreichen namhaften Fachgelehrten. xvi + 388 Seiten. 388 teils farbige Abbildungen. Ganzleinen DM 173.00. Subskriptionspreis DM 138.40. Der Bezug von Teil I verpflichtet zur Abnahme des gesamten Bandes II (Teil 2 erscheint im August 1958). Der Subskriptionspreis für das Gesamtwerk gilt bis zum Erscheinen des letzten Bandes. Jeder Band ist einzeln zum Ladenpreis käuflich. Stuttgart: Georg Thieme Verlag. 1958.

Handbuch der Tuberkulose. Band I. Allgemeine Grundlagen. Herausgegeben von Prof. Dr. J. Hein, Prof. Dr. Dr. h.c. H. Kleinschmidt und Prof. Dr. E. Uehlinger. xvi + 832 Seiten. 244 Abbildungen. Ganzleinen DM. 178.00 Subskriptionspreis DM 142.40. Stuttgart: Georg Thieme Verlag. 1958.

Tumors of the Esophagus. By A. P. Stout, M.D. and R. Lattes, M.D. Pp. 105. 58 Figures. 2 Colour Plates. \$1.00. Washington: Armed Forces Institute of Pathology. 1957.

Tumors of the Skin. By Herbert Z. Lund, M.D. Pp. 330. 265 Figures, 1 Colour Plate. \$3.00. Washington: Armed Forces Institute of Pathology. 1957.

Tumors of the Liver and Intrahepatic Bile Ducts. By Hugh A. Edmonson, M.D. Pp. 216. 207 Figures. 6 Colour Plates. \$2.25. Washington: Armed Forces Institute of Pathology. 1958.

The Surgeon's Tale. A Story of Modern Surgery. By Robert G. Richardson. Pp. 256. Illustrations. 25s. net. London: George Allen & Unwin Ltd. 1958. Local Distributors: Howard B. Timmins, P.O. Box 94, Cape Town.

Pathophysiologische Grundlagen der Chirurgie. Von Priv.-Doz. Dr. Th.O. Lindenschmidt. xx+410 Seiten. 40 Abbildungen. Ganzleinen DM 56.00. Stuttgart: Georg Thieme Verlag. 1958.

Chirurgie der Leber—Klinik und Technik. Von Priv.-Doz. Dr. M. Reifferscheid. xii+168 Seiten. 108 Zum Teil mehrfarbige Abbildungen. DM 36.00. Stuttgart: Georg Thieme Verlag. 1957.

CORRESPONDENCE : BRIEWERUBRIEK

SOUTH AFRICAN MEDICAL CONGRESS, EAST LONDON
27 SEPTEMBER 1959 *et seq.*

To the Editor: We wish to collect and exhibit at the 42nd Congress in 1959 as many of the old *Groups* of Congress as can be found. (One of our Branch members has one of the 1913 Congress which was held in East London.)

May I through your columns request members who have copies of Congress Groups to contact me direct, indicating which Groups they have, and if they are willing to lend them to us for the week of Congress in 1959.

We should like to have this 'display' as complete as possible, as we feel it will be of considerable interest, especially to our older colleagues.

E. McCabe
Organizing Secretary

5 Belgrave Road
East London

EXAGGERATED CLAIMS IN ADVERTISEMENTS

To the Editor: Recently I received an advertisement letter dealing with a drug I shall call 'X', which was headed 'Your own Specialty—Paediatrics' and in which the following appeared:

'Dear Doctor, We need not ask you if you are interested in a cure for enuresis. Not only do we have a drug which seems specific for this condition, it is of great value in a majority of the emotional problems presented by your young patients. This is not our claim, but that of Dr. Leon Oettinger, whose report appears on the attached abstract sheet.'

On reading the abstract we find a somewhat different story. The report by Dr. Oettinger concerned 108 non-epileptic and 17 epileptic children, aged from 6 months to 20 years, with varying behaviour disorders. In the non-epileptic group 48% showed good improvement on the drug being advertised and 20% fair improvement. Of the 17 epileptic patients 13 were worse on therapy. It is not stated how many patients were made worse in the non-epileptic group. There is also a statement that 'five children who had had enuresis were free of this problem while on "X" therapy'.

It seems to me, Sir, that pharmaceutical advertising has fallen into a pretty bad state, that it should misquote a man's work to the degree shown in this example. Firstly the fact that 5 children were free of enuresis while on 'X' therapy, does not warrant the statement that 'we have a drug which seems specific for the condition'. Nor do the quoted results remotely suggest that 'it is of great value in a majority of the emotional problems presented by your young patients'.

From time to time I check the references placed at the end of many advertiser's pamphlets and I am agast at some examples of downright dishonesty which appear. Recently I checked an advertisement for a certain cough mixture in which 5 references were given, not one referring to the substance in question. In other cases preliminary reports are treated as 'the last word' and completely unfounded claims are made. In the race to climb the 'tranquillizer' bandwagon, certain firms have gone to the extent of placing their products on the market on the basis of animal experiments, which are notoriously a bad guide to human behaviour.

Perhaps I can draw a moral by quoting an Editorial from *Hi Fi News* (August 1958); apparently manufacturers of high-fidelity equipment are also liable to strain the truth in describing specifications for their products:

'On reading through a review which is scheduled for publication in *Hi-Fi News* very soon, we were instinctively delighted by the reviewer's remarks that "it was a pleasure to encounter a piece of equipment which came up to, and even exceeded, the claims set out in its specification." And then, as we dwelled on those

remarks, their full implication smote us, and we were shocked to think that they should ever have been written. What kind of an age is this that we live in, when truth is so unusual that we smile when we meet it? What kind of a society are we creating and tolerating, when we allow ourselves to be cheated as an everyday occurrence? A manufacturer's specification of his product should be a true and factual statement of its nature and its capabilities.'

Further on the editor asks:

'Why are some manufacturers so blind to the everyday psychological facts of life? The best way to please people is to let them discover that they have secured a bargain—that they have got something better than they expected. Conversely, the quickest way to lose goodwill is to let people discover that they have been cheated. To make absolutely certain of avoiding the latter, and to be equally sure of achieving the former, there is one infallible rule: *Always claim less for a product than it will do under average domestic conditions.*

'A man will buy a car that he has set his heart on, whether it does 60 m.p.h. or 80. Claim 80 for it, and he will be a bad friend if it does only 79. Claim 60, and he will be thrilled with the unexpected bonus of 19. It is as simple as that; and yet all around us, on every hand, we see this stupidity of exaggeration—of specifications stretched to the limits of optimism, and beyond.'

Is it not time that manufacturers got together and agreed to some basis for giving us the undistorted facts, without minimizing the potential harm the drug may do? By such agreement they would further the cause of medicine, instead of leading us from one disappointment to another, in using drugs which do not live up to their specifications.

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THERAPEUTIC SOCIAL CLUB

To the Editor: Your correspondent,¹ writing in response to the article of Dr. L. S. Gillis² on the Psychiatric Day Hospital at Tara Hospital is under an erroneous impression that no Therapeutic Social Club for psychiatric patients exists in South Africa.

I feel it is important to record the fact that just such a Therapeutic Social Club was established in Johannesburg in February 1949 as an extension of the services of Tara Hospital, and this has been functioning effectively ever since. The functions of this Social Club are to provide a stepping stone in the rehabilitation of psychiatric patients, most of whom have spent a period as an in-patient or a day-patient previously, back to normal living in the community. Patients are also referred direct to the Social Club from psychiatric out-patient departments.

This particular Social Club meets weekly at a venue in the city, quite apart from the hospital itself, and psychiatrists and qualified psychiatric nurses and recreational therapists are present. A substantial part of the running of the affairs of the Social Club is undertaken by the patients themselves, and we have been very impressed over the years with the great therapeutic benefits to these patients.

I should mention that the Social Club is planned so as to provide a continuity of observation, treatment and rehabilitation in the community with the other facilities of Tara Hospital, i.e. out-patient, in-patient and day-patient services.

H. MOROSS
Medical Superintendent

Tara Hospital
Johannesburg
25 September 1958

1. Lazarus, A. A. (1958): *S. Afr. Med. J.*, 32, 952 (20 September).
2. Gillis, L. S. (1958): *Ibid.*, 32, 881.